



FORT JACKSON

STORMWATER MANAGEMENT PLAN (SWMP)

Fort Jackson
2562 ESSAYONS WAY
FORT JACKSON, SC 29207
803-751-6858

July 2014

PREPARED IN ACCORDANCE WITH SCDHEC PERMIT #SCR030000

CERTIFICATION OF STORMWATER MANAGEMENT PLAN

I certify that Fort Jackson has taken the necessary steps to obtain and maintain full legal authority to implement and enforce each of the requirements contained in the NPDES General Permit for Storm Water Discharges from Regulated Small Municipal Separate Storm Sewer Systems (SMS4), Permit Number SCR030000.

Tom Roberts
Name (Print)

Director, PPW
Title

Tom Roberts
Signature

26 Jun 14
Date

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List of Acronyms and Abbreviations

| | |
|--------|---|
| BMP | Best Management Practice |
| CSR | Construction Site Runoff |
| ECO | Environmental Compliance Officers |
| EPA | Environmental Protection Agency |
| EPAS | Environmental Performance Assessment System |
| EQCC | Environmental Quality Control Committee |
| ERP | Enforcement Response Plan |
| FJ | Fort Jackson |
| IDDE | Illicit Discharge Detection and Elimination |
| MCM | Minimum Control Measure |
| MEP | Maximum Extent Practicable |
| MS4 | Municipal Separate Storm System |
| NEPA | National Environmental Policy Act |
| NOI | Notice of Intent |
| NPDES | National Pollutant Discharge Elimination System |
| PCR | Post Construction Runoff |
| PEO | Public Education and Outreach |
| PIP | Public Involvement and Participation |
| PP&GH | Pollution Prevention and Good House Keeping |
| QRP | Qualified Recycle Program |
| SCDHEC | South Carolina Department of Health and Environmental Control |
| SMS4 | Small Municipal Separate Storm System |
| SOP | Standard Operating Procedure |
| SPCC | Spill Prevention, Control, and Countermeasure |
| SWMP | Stormwater Management Plan |
| SWP3 | Storm Water Pollution Prevention Plan |
| TMDL | Total Maximum Daily Load |

FORT JACKSON NPDES STORMWATER MANAGEMENT PLAN (SWMP)

1.0 Introduction

This Stormwater Management Plan (SWMP) is designed to reduce the discharge of pollutants from Fort Jackson’s Municipal Separate Storm Sewer System (MS4) to the maximum extent practicable, to protect water quality and to satisfy the appropriate requirements of the Clean Water Act. The contents are expected to change with time due to the iterative process of implementing the SWMP recognized by the Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (SCDHEC). EPA predicts that it will likely take two to three MS4 permit terms (5-year terms) to fully develop and implement the SWMP. The first permit term focused heavily on data collection, organization, development of necessary programs, and initial implementation. During the current second MS4 permit cycle, the SWMP will need to be amended based on the observed effectiveness of existing program components and to address the terms and conditions of the new permit. This document is meant to be a living document that will be revisited on an annual basis to reflect accomplishments, potential revisions to program components, and additions of other or expanded efforts.

This SWMP addresses the requirements of the NPDES General Permit for Discharges from Regulated SMS4s; Permit No. SCR030000, effective January 1, 2014 and expiring December 31, 2018. Specific language from the SMS4 general permit has been copied and pasted into this SWMP for consistency and is italicized. The section numbers used in this SWMP correspond with the general permit section numbers.

Updates to the SWMP will be included Appendix A.

2.0 Notice of Intent (NOI) Information

The following information is applicable to Fort Jackson.

Table 1: Notice of Intent (NOI) Table

| General Permit Section | NOI Requirement | Description |
|--|-----------------------|---|
| 2.2.1 Information on the Permittee: | | |
| 2.2.1.1 | Name of Municipality: | Fort Jackson |
| | Mailing Address: | Barbara Williams 2562 Essayons Way Fort Jackson, SC 29207 |
| | Telephone Number: | 803-751-6858 |
| 2.2.1.2 | Public Entity Type: | United States Army Garrison |

| 2.2.2 Information on the SMS4: | | |
|--------------------------------|---|--|
| 2.2.2.1 | Map of Fort Jackson: | <p>SMS4 Location: Fort Jackson</p> <p>SMS4 Center Coordinates: Latitude: N34° 00' Longitude: W80° 57'</p> <p>SMS4 Urbanized Area: Approximately 5 square miles</p>  <p>The map displays the Fort Jackson area with various colored zones: a red outline for the Cantonment Area, a green area for the 2010 Urbanized Area, and a yellow area for the Fort Jackson Urbanized Area. Major waterways are shown in blue, including Gills Creek, Mill Creek, Wildcat Creek, and others. A legend in the bottom right corner identifies these features. A scale bar and north arrow are also present.</p> |
| 2.2.2.2 | Major Receiving Waters: | <p>Gills Creek*,** Mill Creek* Wildcat Creek</p> <p>A more detailed map is provided in Appendix C.</p> |
| 2.2.2.3 | Indian Lands: | No portion of Fort Jackson's SMS4 is located on Indian Country Lands. |
| 2.2.2.4 | List of Significant Entities within Fort Jackson: | Fort Jackson has several branches of the United States and State of South Carolina military. However, activities conducted in the cantonment area are under the control of the Garrison Commander and are required to comply with all environmental programs established by Fort Jackson, including the NPDES SMS4 permit. |
| 2.2.2.5 2.2.2.6 | BMP Information: | See Section 4.0 for a discussion of the BMPs for each minimum measure. Each minimum measure contains all available information on the BMPs that are to be implemented, their measurable goals, a schedule for their implementation, and the person(s) responsible. |

*Listed on the CWA §303(d) list

**Allocated a TMDL

3.0 Special Conditions Applicable to Permitted Stormwater Discharges to Sensitive Waters

The SMS4 permit requires that Fort Jackson determine whether its systems discharge to sensitive waters. For the purpose of the permit, sensitive waters are waters:

- With a Total Maximum Daily Load (TMDL) developed and approved, or established by EPA,
- Included in the most recent SC DHEC Section 303(d) list,
- Pursuant to DHEC Water Classifications & Standards (R.61-68) and Regulations (R.61-69) classified as either:
 - Outstanding National Resource Waters (ONRW)
 - Outstanding Resource Waters (ORW)
 - Trout Waters, or
 - Shellfish Harvesting Waters (SFH), and
- In Source Water Protection Areas (SWPA).

3.1 Determination of Receiving Water Conditions and Impacts

The general permit requires Fort Jackson to determine whether stormwater discharges from any part of the MS4 contribute one or more pollutants directly or indirectly to an impaired water body that is listed in the most recent South Carolina 303(d) list. The list identifies water bodies that do not currently meet state water quality standards. The list is intended to be used as a tool to determine what types of water quality improvement measures should be taken. To meet this permit requirement, Fort Jackson has collected information from SCDHEC on the location of impaired waters, as determined from results of the State’s monitoring program, that could potentially be impacted by discharges from Fort Jackson’s SMS4. Table 2 provides a list of the impaired water bodies on the 2014 303(d) list that Fort Jackson’s SMS4 contributes to, either directly or indirectly.

Table 2: 2014 303(d) List of Impaired Stations Downstream of Fort Jackson’s SMS4 Area

| Waterbody | Station Description | Station | Pollutant of Concern | TMDL Target Date |
|-------------|---------------------|---------|----------------------|------------------|
| Mill Creek | MILL CK AT SC 262 | C-021 | REC <i>E. coli</i> | 2016 |
| Gills Creek | FOREST LAKE AT DAM | C-068 | FISH HG | 2027 |

*At the time this SWMP was created, the 2014 303(d) list was in draft form and not finalized.

3.2 TMDL Monitoring and Assessment

In compliance with Section 3.2.1 of the SMS4 general permit, TMDL monitoring and assessment plans will be developed for all TMDL waters receiving SMS4 discharges of pollutant(s) of concern, except where Section 3.1.1.2 of the SMS4 general permit is applicable. For TMDLs existing before the effective date of permit coverage, TMDL monitoring and assessment plans will be completed, submitted to SCDHEC, and appended to this SWMP within 12 months of the effective date of permit coverage. For newly established TMDLs, Fort Jackson will complete a TMDL monitoring and assessment plan within 12 months of the effective date of the TMDL. As completed, TMDL monitoring and assessment plans will be submitted to SCDHEC and attached to this SWMP in Appendix D. Sampling will be initiated within 18 months of the effective date of permit coverage for TMDLs existing before the effective date of

permit coverage. For newly established TMDLs, Fort Jackson will initiate sampling within 18 months of the effective date of the TMDL.

Table 3: List of Issued TMDLs Downstream of Fort Jackson’s SMS4 Area

| Waterbody | Parameter of Concern | Sites | Date of TMDL |
|-------------|----------------------|--------------|--------------|
| Gills Creek | Dissolved Oxygen | C-017 | July 2010 |
| Gills Creek | Fecal Coliform | C-001, C-017 | July 2010 |

3.3 TMDL Implementation and Analysis

In compliance with Section 3.3.2 of the general SMS4 permit, TMDL Implementation Plans will be developed for all TMDL waters receiving SMS4 discharges of pollutant(s) of concern, except when Section 3.1.1.2. of the SMS4 general permit is applicable. TMDL Implementation Plans will be completed and submitted to SCDHEC within 48 months from the effective date of permit coverage, or, for TMDLs established after the effective date of permit coverage, with 48 months of the effective date of the TMDL.

3.4 Discharges to Impaired Water Bodies

A list of all impaired water bodies receiving discharges from Fort Jackson’s SMS4 can be found in Table 2. For those impaired water bodies for which no TMDL has been assigned, a description of water quality controls for discharges to impaired water bodies, in compliance with Section 3.4.2 of the SMS4 general permit, is provided in the minimum control measures in section 4.2 below.

3.5 Discharges to Classified Waters

Fort Jackson does not discharge directly or indirectly to a water body classified as an Outstanding Resource, Trout water, or Shellfish Harvesting water.

3.6 Discharges to Source Water Protection Areas

For discharges to Source Water Protection Areas, protection will be provided through BMP applications conducted through implementation of the six minimum control measures in section 4.2.

4.0 Stormwater Management Plan (SWMP)

Table 4: SWMP Requirements

| SWMP REQUIREMENTS | | | |
|--|--|-----------|-----------------------------|
| Develop and Implement SWMP | Completed: <input checked="" type="checkbox"/> | | |
| | Section: 4.1.2 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Revise and update written SWMP document and submit the SWMP to SCDHEC Bureau of Water. | Deadline: July 1, 2014 | Once | Directorate of Public Works |
| Update Stormwater Management Ordinance (Regulation) | Completed: <input type="checkbox"/> | | |
| | Section: 4.1.3 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Review and revise the Stormwater Management Ordinance (Regulation), or adopt any new regulatory mechanisms that provide adequate legal authority to control pollutant discharges into and from the SMS4, and to meet the requirements of the MS4 permit. | Deadline: January 1, 2015 | Once | Directorate of Public Works |
| Develop Enforcement Response Plan (ERP) | Completed: <input type="checkbox"/> | | |
| | Section: 4.1.5 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Implement an enforcement response plan (ERP). | Deadline: January 1, 2015 | Once | Directorate of Public Works |
| Update Stormwater Management Plan | Completed: <input type="checkbox"/> | | |
| | Section: 4.1.10 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Review and revise the SWMP document to keep it up to date during the term of the permit. | Throughout the Permit Term | Annually | Directorate of Public Works |

4.1.1 Requirements of the NPDES SMS4 General Permit

Fort Jackson will implement and enforce this SWMP to reduce the discharge of pollutants from its SMS4 to the maximum extent practicable to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.

4.1.2 SWMP Development

Fort Jackson will revise and update the written SWMP document and submit the SWMP to the SCDHEC Bureau of Water by July 1, 2014.

4.1.3 Contents of the SWMP

At a minimum, Fort Jackson must include ordinances, or other regulatory mechanisms, providing the legal authority necessary to implement and enforce the requirements of the SMS4 general permit (Appendix E). By January 1, 2015, Fort Jackson will review and revise the Stormwater Management

Regulation, or adopt any new regulatory mechanisms that provide adequate legal authority to control pollutant discharges into and from the SMS4 and to meet the requirements of the SMS4 general permit.

4.1.4 Requirement to Develop Adequate Legal Authority

At a minimum, the legal authority will address the following:

- *Authority to Prohibit Illicit Discharges*
- *Determination of Allowable Non-Stormwater Discharges*
- *Authority to Prohibit Spills or Other Releases*
- *Authority to Require Compliance*
- *Authority to Require Installation, Implementation, and Maintenance of Control Measures*
- *Authority to Receive and Collect Information*
- *Authority to Inspect*
- *Response to Violations*
- *Civil/Criminal Penalties*
- *Interagency Agreements (if applicable)*

A certification statement has been included in this SWMP that certifies that Fort Jackson has taken the necessary steps to obtain and maintain full legal authority to implement and enforce each of the requirements contained in the NPDES SMS4 general permit (see Page i).

4.1.5 Enforcement Measures and Tracking

Fort Jackson will implement an enforcement response plan (ERP) by January 1, 2015, and revise as necessary. The ERP describes the Fort Jackson's potential responses to violations and addresses repeat and continuing violations through progressively stricter responses as needed to achieve compliance.

4.1.5.2 Enforcement Tracking. *Fort Jackson will track instances of non-compliance either in hard-copy files or electronically.*

4.1.5.3 Recidivism Reduction. *Fort Jackson will summarize inspection results by consuetudinary violators and include incentives, disincentives, or an increased inspection frequency at the operator's sites.*

4.1.6 Reporting Requirements

Fort Jackson will at a minimum submit the following information in the bi-annual report (See Section 5.3 for details).

- *The status of implementing the components of the SWMP that are established as permit conditions;*
- *Proposed changes to the SWMP that are established as permit conditions;*
- *Revisions, if necessary, to the assessment of controls and the fiscal analysis, including a description of staff resources necessary to meet the requirements of the permit;*
- *A summary of data, including monitoring data, that is accumulated throughout the reporting year; and,*
- *A summary describing the number and nature of enforcement actions, inspections, and public education programs.*

4.1.7 SWMP Minimum Control Measure Requirements

Fort Jackson's SMWP will include the following information for each of the six minimum control measures.

Each (MCM) is described in Section 4.2 of this SMWP in detail:

- *Best management practices (BMP) that Fort Jackson or another entity will implement for each of the MCM;*
- *Measurable goals for each of the BMP including, as appropriate, the months and years in which Fort Jackson will undertake required actions, including interim milestones and the frequency of the action; and,*
- *Person, or persons, responsible for implementing or coordinating the BMP for Fort Jackson's SWMP.*

4.1.10 SWMP Modifications

SC DHEC Bureau of Water may notify Fort Jackson of the need to modify the SMWP document to be consistent with the permit, in which case Fort Jackson will have 90 days to finalize such changes to the program. Fort Jackson will keep the SMWP document up to date during the term of the permit. Where Fort Jackson determines that Regulation modifications are needed to address any procedural, protocol, or programmatic change, such changes must be made as soon as practicable, but not later than 360 days.

4.2 Minimum Control Measures

In compliance with SMS4 permit requirements, this SWMP includes a description of the six minimum control measures (MCMs) and details on the development and implementation of the program to address MCM requirements. The details on each minimum measure include the proposed BMPs, measurable goals for each proposed BMP, the responsible departments and staff to implement the BMP, and the respective implementation schedule (i.e. start date, frequency of activities, etc.). In each of the BMP tables for each MCM, the schedule reflects the time from the effective date of the SWMP for completing milestones. The frequency of each BMP is given per permit cycle or year.

4.2.1 Public Education and Outreach (Minimum Measure #1)

In order to meet the requirements of Minimum Measure #1, Fort Jackson has focused on the development and implementation of educational materials designed to inform the public and military personnel about the impacts that storm water discharges could have on local water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

The selection of BMPs listed in the subsequent sections describe how the general public, businesses, developers, engineers, and military tenants will be informed about the importance of protecting our water resources; how individuals and groups will be informed on how to become involved in the storm water program; the mechanisms that will be used to reach target audiences, the pollutants of concern, the pollutant sources of concern, responsibility for implementation, and how success will be measured. The target audiences and pollutants of concern were selected based on those groups that either contribute to or have the greatest ability to reduce stormwater pollution within Fort Jackson. The Public Education and Outreach efforts utilized are expected to reach all of the constituents within Fort Jackson's permitted area. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected

by formulating attainable goals for the various BMP implementation steps or tasks. The responsibility for implementation of this minimum measure is described with each BMP procedure. Table 5 describes the components of the Fort’s Public Education and Outreach program.

Table 5: Minimum Measure #1 Permit Requirements

| |
|---|
| <p>4.2.1.1.1 The pollutant(s) of concern (POC) within Fort Jackson’s watershed area(s):</p> |
| <p>In Fort Jackson’s permitted area, the following have been determined to be pollutants of concern:</p> <ul style="list-style-type: none"> ➤ Sediment ➤ Litter ➤ Nutrients ➤ Hazardous Material ➤ Bacteria ➤ Metals <p>Specifically, there is a concern of bacteria in the Gills Creek watershed.</p> |
| <p>4.2.1.1.2 Description of the POC(s) listed above:</p> |
| <p>The following lists each pollutant of concern identified in 4.2.1.1.1 and contains a brief description.</p> <ul style="list-style-type: none"> ➤ Sediment: One of the pollutants that may contribute to stormwater pollution is sediment. Sediment contains nitrogen, phosphorus, and possibly other contaminants that can be transported during a rain event into streams. The excess nitrogen, phosphorus, and other contaminants carried in the sediment may cause harm to streams and wildlife habitats. ➤ Litter: Waste that is disposed of improperly can wash into streams during storm events. Litter that washes into waterways does not easily break down and has the potential to cause harm on stream life and wildlife habitats. Litter may reduce oxygen levels in streams that harm plant and animal life and may have an overall negative effect on the stream. ➤ Nutrients: Nutrients can enter stormwater either naturally or through human causes. Excess nutrients can increase the growth of algae that leads to algal blooms and eutrophic conditions. The major sources of nutrients in stormwater are through fertilizers, detergents, plant debris, atmospheric deposition, improperly functioning septic systems, and animal waste. ➤ Hazardous Material: Hazardous materials can be from a wide variety of chemical applications. If chemicals are not disposed of, stored, or cleaned up properly they can runoff in stormwater that can lead to harmful effects to the receiving waters. ➤ Bacteria: Bacteria may be contributed to stormwater through illicit connections of sanitary sewers to stormwater sewers, sanitary sewer overflows, improper disposal of pet waste, and leaking sanitary sewers. Elevated bacteria levels in streams may have a harmful effect on the stream habitat and could also be a public health risk. ➤ Metals: The primary sources of metals in stormwater are runoff over galvanized metal rooftops, gutters, downspouts, and metal contributions from brake pads on roads and parking lots. Some metals can bioaccumulate in an ecosystem and can harm microorganisms that live in soils and can also be harmful to human health. |
| <p style="text-align: center;">SPACE INTENTIONALLY LEFT BLANK</p> |

4.2.1.1.3 Programs targeted at high priority community issues with the potential to decrease the POC's effect on water quality:

Community Issue 1: In the military installation setting, how will each group learn about the updated environmental awareness information and who will organize this?

This issue is resolved by continuing to implement the Environmental Compliance Officers (ECO) Course that is offered every other month. All organizations, down to the company level (or civilian equivalent), must have a primary and alternate ECO. The ECO is responsible for maintaining the Environmental Compliance Binder, conducting monthly environmental compliance assessments, accompanying inspectors, informing organization directors/commanders of environmental issues, ensuring deficiencies are corrected as soon as possible, and conducting annual environmental awareness training. The ECO course insures that each organization is represented and stays in compliance. This course ensures that both short term and long term goals of staying in compliance with the environmental standards are met. Having a representative ECO for each organization ensures that others in the organization will be aware of the latest environmental issues and will learn how to stay in compliance.

Community Issue 2: How will containing hazardous substances, materials, and other waste be a priority at Fort Jackson?

This community issue is addressed by conducting trainings to be sure that substances, materials, and waste are handled, stored and disposed of properly. Hazardous Substance (HS) Management training is offered quarterly at Fort Jackson. Personnel that store or manage hazardous waste or controlled waste, and organizations that have a high potential for hazardous waste and substances violations are required to take this training. Personnel must attend the initial training within 6 months and must attend a refresher training course every year. This course will educate personnel on managing hazardous materials and substances in the short run, and since it is required annually, it will update them on any new requirements in the long run. Educating personnel on hazardous substance management will help prevent hazardous substances from begin handled inappropriately and exposed to the environment. Fort Jackson also has a Hazardous Material Management Program (HMMP) that includes training on regulations, reporting, tracking, and the reuse of hazardous materials. A Hazardous Material Manager is appointed by a supervisor or Environmental Compliance Officer (ECO) whose responsibilities include managing the Hazardous Materials Program, inspecting the Hazardous Materials weekly, tracking the Hazardous Materials, and reporting the Hazardous Materials usage. The Hazardous Material Manager is also responsible for submitting Hazardous Chemical Inventory Form (HCIF) by the 10th of every month. Fort Jackson has a hazardous waste storage facility and a recycling center on site to manage and dispose of materials properly.

Community Issue 3: How will information regarding recycling, training schedules, IDDE procedures, and other environmental messages get delivered to all groups at Fort Jackson?

Fort Jackson provides information to all groups at Fort Jackson by generating an Environmental Newsletter and sending it out via email to military, civilian, and industrial employees post-wide. In this newsletter, many important topics are discussed and brought to the attention of everyone at Fort Jackson. Upcoming events are listed and include special environmental events such as when the ECO course is held, when specific environmental meetings and seminars are held, when lake clean-up days are, and when other special events and trainings are held. The newsletter also includes information regarding the recycling program, prescribed burns, stormwater illicit discharges, asbestos and lead-based paint, and the environmental contact list on who to contact about different concerns. Providing this important information post-wide informs people what they can be doing to help with different environmental issues for the short term and educating them to have an effect for the long term.

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4.2.1.1.4 The audience(s) that is believed to have an influence on the POC identified and that is believed to have an influence on the goals and objectives identified:

The targeted audiences were developed based on which have the greatest potential to impact water quality as well as those that will be the most receptive to altering their actions either with their current knowledge or with the education they will receive as part of Fort Jackson's efforts. The target audiences are listed below.

- Military Personnel
- Developers/Engineers
- Residents in Military Housing
- School Children (K-12) and Teachers
- Industrial Facility Managers
- Citizen Workforce

4.2.1.1.5 The message(s) directed at the target audience(s) listed above to achieve the program goals and objectives:

The targeted audiences should receive training to educate and confirm that personnel, engineers, residents, and managers know the appropriate procedures to follow to positively impact water quality and what standards and regulations are enforced at Fort Jackson. School children, teachers, and the citizen workforce should have special programs to educate them on how they can get involved and make a positive difference in the water quality on Fort Jackson.

4.2.1.1.6 Education campaign(s) and materials:

In order to educate and train those on Fort Jackson, the following campaigns and/or materials will be used:

- Environmental website
- Newsletters
- Festivals/fairs
- Educational trainings/workshops
- Storm Water Pollution Prevention brochures in Welcome Packets for new residents in housing
- Annual Industrial Training
- In-class presentations for school aged children
- Signs

4.2.1.1.7 Distribution of campaign materials:

The following are methods to reach the targeted audiences listed in section 4.2.1.1.4 above:

- Distribution of materials through the Environmental Website
- Distribution of announcements through Fort Jackson's Environmental News newsletter
- Presentations at different trainings/workshops
- Brochures provided new residents in housing and throughout Fort Jackson
- Signs
- Handouts/Posters at festivals/fairs
- Classroom presentations and handouts

4.2.1.1.8 Quantitative and/or qualitative formative assessment of programs:

The success will be measured by the degree of implementation, to include the number of target audiences reached and participating through the public awareness and marketing campaign. Records will be reviewed as to the number of signs produced and placed on Fort Jackson, number of public service announcements issued, number of training workshops held, number of students taught, number of participants in festivals and activities, etc. Changes will be made to improve each program as seen necessary.

| |
|---|
| 4.2.1.1.9 Utilization of public input into the development of this program: |
| Public input was utilized from previous events, seminars, trainings, and festivals to evaluate what programs should continue to be developed and what new programs should be developed. |
| 4.2.1.2.10 Implementation of program goals and objectives: |
| Fort Jackson is continuing a robust public awareness and marketing campaign to include educational sessions for designated ECOs, newsletters, as well as staff education classes and miscellaneous flyers for distribution at select locations such as schools, barracks, at events coordinated by the Environmental Division and other events (Safety Day, Spring Jamboree, retirement functions, etc.). The public awareness and marketing campaign will include messages that provide information on how individuals and the various target groups can become involved. Schools located on the fort will also have a large impact on implementing the program goals that are aimed at school age children. |
| 4.2.1.1.11 Process for annual adjustment of program based upon program assessment: |
| Annually the program will be adjusted, if needed, based on the degree of implementation and feedback from the target audiences. Records will be reviewed as to the number of participants at different events, the number of trainings held, the number of material distributed, etc. Fort Jackson will adjust their educational materials and the delivery of such materials to address any shortcomings found as a result of these assessments. |

Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating attainable goals for the various BMP implementation steps or tasks.

In order to meet the requirements of Minimum Measure #1, Fort Jackson will implement the following BMPs:

- Develop and Update Campaign Materials
- Sponsor/Support Community Events
- Distribute Campaign Materials
- Assess the Public Education Plan
- Develop Annual Adjustments for the Public Education and Outreach Plan

Table 6 describes the components of Fort Jackson’s Public Education and Outreach program.

Table 6: Best Management Practices – Minimum Measure #1

| PUBLIC EDUCATION AND OUTREACH BMPS | | | |
|---|--|-----------------------------|-----------------------------|
| Develop and Update Campaign Materials | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.1.1.6 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Fort Jackson will update the following campaign and education materials: <ul style="list-style-type: none"> • Environmental website. • Newsletters. • Handouts at festivals and fairs. • Presentations for trainings and workshops. • Welcome Packet Brochures • In-class presentations for school aged children. • Signs. | Deadline: December 31, 2014 | Once During the Permit Term | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> • Updated website, signs, and handouts. | | | |
| Sponsor/Support Community Events | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.1.1.3 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Fort Jackson will sponsor/support community events by: promoting/advertising events, distributing water quality awareness campaign items, and providing other general assistance as resources allow. Fort Jackson intends to sponsor/support the following events: <ul style="list-style-type: none"> • Environmental Compliance Officers (ECO) Course • Earth Day Exhibit • America Recycles Day Event • School Events (Science, Technology, Engineering, and Math (STEM) Program, Science Days, etc.) • Holiday Events • Industrial Training • Environmental Awareness Training • Hazardous Substances Management Training • Spill Prevention, Control, and Countermeasure (SPCC) Training | Throughout Permit Term Beginning in Year 2 | Annually | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> • Provide sponsorship/support at the events and training held at Fort Jackson. | | | |
| <ul style="list-style-type: none"> • The number of attendees at the different trainings and events at Fort Jackson. | | | |
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|--|--|--|-----------------------------|
| Distribute Campaign Materials | | Completed: <input type="checkbox"/> | |
| | | Section: 4.2.1.1.7 | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Distribute campaign materials at various community events including but not limited to: Earth Day Exhibit, America Recycles Day Event, School Events, and other events that are held at Fort Jackson. Educational materials will also include those distributed through trainings and workshops including but not limited to: the Environmental Compliance Officers (ECO) training, Environmental Awareness Training, Hazardous Substances Management Training, Spill Prevention, Control, and Countermeasure (SPCCC) training, etc. Fort Jackson will also continue to develop and revise, as necessary, the Environmental Newsletter. Other campaign materials distributed will include but is not limited to: Housing Welcome Packet Pamphlets regarding Stormwater Pollution Prevention, Environmental Field Cards, the Fort Jackson Environmental Guidebook, and Reuse-Recycle-Disposal Guides. | Throughout Permit Term Beginning in Year 2 | Annually | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> 400 handouts distributed at various community events. | | | |
| <ul style="list-style-type: none"> 1000 attendees at the various community events, trainings, and workshops. | | | |
| Assess the Public Education and Outreach Plan | | Completed: <input type="checkbox"/> | |
| | | Section: 4.2.1.1.8 | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Assess the Public Education program to determine any necessary changes to the programs goals or objectives. | Deadline: June 30, 2016 | Annually | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Identify public education and outreach program deficiencies/limitations by comparing PEO program results to the measurable goals. | | | |
| Develop Annual Adjustments for the Public Education and Outreach Plan | | Completed: <input type="checkbox"/> | |
| | | Section: 4.2.1.1.11 | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Make adjustments to educational materials and the delivery of such materials to address any shortcomings found as a result of the assessments in Milestone 4.2.1.1.8. | Deadline: December 31, 2016 | Annually | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Revise public education and outreach plan to address any program deficiencies/limitations identified during the annual assessment | | | |

4.2.2 Public Involvement/Participation (Minimum Measure #2)

In order to meet the requirements of Minimum Measure #2, Fort Jackson has included BMPs that focus on providing opportunities for the different sectors of the public to become involved in stormwater management activities. The BMPs selected in Table 7 describe how the military residents, citizen workforce, developers, and engineers will be informed about the steps they can take individually and as part of Fort Jackson programs to reduce storm water pollution. The target audiences, programs, and pollutants of concern were selected based on what has the greatest ability to reduce potential water quality impacts within Fort Jackson's permitted area. The measurable goals for each BMP for the Public Participation and Involvement minimum measure will be used to evaluate the success of each BMP. Table 7 describes the components of Fort Jackson's Public Involvement/Participation program:

Table 7: Minimum Measure #2 Permit Requirements

| |
|--|
| 4.2.2.1.1 Available opportunities for citizens to participate in the implementation of stormwater controls: |
| <p>Although there is no "public" per se at Fort Jackson, only soldiers and civilian employees, several groups have been identified for this minimum measure that will be given the opportunity to be involved. Adequate notification will be given through newsletters and flyers. There are volunteer opportunities that include a lake/stream clean-up and a spring and fall clean-up. Boy Scout and Girl Scout projects are also opportunities available for citizens to participate. Some of these opportunities include storm drain stenciling and environmental education posters. There is also an Environmental Quality Control Committee (EQCC) that allows military personnel (Garrison Commander down to unit commanders) and civilian employees from various directorates to meet and advise Commanders, Directors, and Staff on environmental priorities, policies, strategies, and programs.</p> |
| 4.2.2.1.2 Accessing information on this SWMP: |
| <p>Information about Fort Jackson's SWMP will be able to be found on Fort Jackson's website. Further information about Fort Jackson's SWMP can be found by calling the Fort Jackson Environmental Division (803-751-6858).</p> |
| 4.2.2.1.3 Procedures for implementing the Public Involvement/Participation (PIP) MCM into the SWMP: |
| <p>This MCM will allow the public to participate in the EQCC and will be open to project ideas, such as Boy Scout and Girl Scout troop projects, along with other projects and events. Events, projects, and other areas for participation will be advertised to the public in Environmental Newsletters distributed to those at Fort Jackson.</p> |

The BMP's selected in Table 8 describe how the citizens will be informed about the SWMP and lists activities for public participation. The measurable goals for each BMP for the Public Participation and Involvement minimum measure will be used to evaluate the success of each BMP.

In order to meet the requirements of Minimum Measure #2, Fort Jackson will:

- Sponsor/Support Citizen Participation Events
- Provide Access to Information for the SWMP

Table 8 describes the components of Fort Jackson's Public Involvement/Participation program:

Table 8: Best Management Practices – Minimum Measure #2

| PUBLIC INVOLVEMENT/PARTICIPATION BMPS | | | |
|---|--|-------------------------|-----------------------------|
| Sponsor/Support Citizen Participation Events | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.2.1.1 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Fort Jackson will sponsor/support community events by: promoting/advertising events, distributing water quality awareness campaign items, and providing other general assistance as resources allow. Fort Jackson intends to sponsor/support the following events and programs: <ul style="list-style-type: none"> • Lake/stream Clean-Up Days • Supporting Boy Scout and Girl Scout projects • Environmental Quality Control Committee (EQCC) meetings • Material Storage and Recycling Programs • Hazardous Material Management Plan Program | Throughout Permit Term Beginning in Year 2 | Annually | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> • Provide sponsorship/support for the clean-up days. | | | |
| <ul style="list-style-type: none"> • Continue to sponsor/support meetings to involve the public in decisions and programs at the Fort. | | | |
| <ul style="list-style-type: none"> • Number of people who attend events and program meetings. | | | |
| Provide Access to Information for the SWMP | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.2.1.2 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Ensure the SWMP can easily be found through the Fort Jackson website or requesting it through the Environmental Division phone number. | Deadline: December 31, 2014 | Once during permit term | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> • Number of views to the Fort Jackson SWMP webpage. | | | |

4.2.3 Illicit Discharge Detection and Elimination (Minimum Measure #3)

In order to meet the requirements of Minimum Measure #3, Fort Jackson has listed BMPs that focus on the detection and elimination of illicit discharges into the MS4. A storm sewer system map showing the location of all outfalls and the names and location of all receiving waters has been developed and maintained through field data collection efforts. In addition, a system inventory of the entire stormwater collection system has been developed prior to the NPDES program implementation and has been updated as needed. This will result in increased knowledge of the dynamics of the system and improved problem resolution. The BMPs listed below describe map development and update procedures; the legal authority mechanism (to the extent allowable under State, Tribal, or local law) used to effectively prohibit illicit discharges; enforcement procedures and actions to ensure that the regulatory mechanism is implemented; the dry weather screening program and procedures for tracing and locating the source of and illicit discharge; procedures for locating priority areas; and procedures for removing the source of the illicit discharge. BMPs focusing on education and training of public employees, businesses, and the general public with regard to the hazards associated with illegal discharges and improper disposal of waste are described in the Public Education and Good Housekeeping minimum measures. Evaluation of the success of this minimum measure will be based on the level of implementation of the BMPs included in this minimum measure. The responsibility for implementation of this minimum measure is described

with each BMP procedure. Table 9 describes the components of the Fort’s Illicit Discharge Detection and Elimination (IDDE) program. The sampling procedures for the IDDE program can be found in Appendix F.

Table 9: Minimum Measure #3 Permit Requirements

| |
|---|
| <p>4.2.3.2.1 Development of the storm sewer system map:</p> |
| <p>A map of Fort Jackson limits showing watersheds, streams, and locations of outfalls has been created by following individual stormwater pipe networks to their endpoint and walking/boating the streams looking for outfalls. Fort Jackson used GPS and GIS technology in the mapping process. Fort Jackson has an Illicit Discharge Detection and Elimination Field Notebook and an Outfall Inventory & Illicit Discharge Action Plan that documents these procedures in more detail. The Outfall Inventory & Illicit Discharge Action Plan includes the procedures for updating outfalls that are constructed with new developments. The outfall inventory of new areas and the re-inventorying of previously completed areas will be completed as needed.</p> |
| <p>4.2.3.2.2 Identification of priority areas.</p> |
| <p>Priority areas for IDDE sampling will be selected based on aging sanitary sewer systems within the cantonment area, where the older sewer lines will be a higher priority. Palmetto State Utility Services (PSUS) continues to perform sewer system upgrades, with over 30,000 linear feet of sanitary sewer pipe replaced in 2013. According to their study, this upgrade has reduced inflow and infiltration by almost 20% and has also significantly reduced the number of sanitary sewer overflows occurring on post. <i>Fort Jackson will document the basis for its selection of each priority area and create a list of all priority areas identified in the system. This priority list will be updated annually to reflect changing priorities and be available for review by the permitting authority.</i></p> |
| <p>4.2.3.2.3.a Field screening procedures and implementation:</p> |
| <p>The dry weather field screening procedures that will be used to detect illicit discharges can be found in the Fort Jackson IDDE Action Plan and Field Notebook. These documents will be revised as applicable within one year of the effective date of permit coverage.</p> <p>Fort Jackson will conduct dry weather field screening and/or analytical monitoring, when necessary, to identify the source of illicit discharges. At a minimum, Fort Jackson will:</p> <ol style="list-style-type: none"> i. Identify all field screening points within the priority areas identified in Part 4.2.3.2 where field screening and analytical monitoring, if warranted, will take place. In addition, where permittees are aware of non-stormwater discharges that occur outside of the priority areas, permittees must identify points, outfalls, or major outfalls to conduct field screening in the drainage area of such non-stormwater discharges; ii. Fort Jackson will include the following in the field screening portion of their IDDE program: <ol style="list-style-type: none"> a. <i>The areas and the schedule for conducting the screening, the proposed location of outfalls, or field screening points, should reflect water quality concerns to the MEP and to protect water quality.</i> b. <i>A description of which screening methods will be used (i.e. outfall, major outfall, or screening point) and a description as to why it is appropriate for each area,</i> c. <i>A description of field screening equipment with their respective methodologies for use.</i> iii. <i>Conduct all dry weather visual observations and required field screening at each outfall/field screening point. All dry weather screening activities should be conducted after 72-hours of continuous dry conditions following at least 0.10-inch of rainfall.</i> iv. <i>Document elimination of the illicit discharge.</i> |

4.2.3.2.3.b Field Screening Assessment:

Assessing the effectiveness of the field screening programs will be included *in the third annual report to determine if the level of effort is adequate in attaining the effective prohibition of non-stormwater discharges into the MS4. Where updates are found to be necessary, Fort Jackson will make the appropriate changes and include them as part of the renotification.* The effectiveness of the program will be assessed by looking at the number of illicit discharges detected and corrected.

4.2.3.2.3.c Procedures for notifying another MS4 of an illicit discharge.

Fort Jackson's MS4 does not receive runoff from surrounding MS4s. If an illicit is found at an outfall that is entering into another MS4 from Fort Jackson, then the illicit will be reported and corrected.

4.2.3.2.3.d Addressing a notification of an illicit discharge by another operator:

A procedures manual for illicit discharge detection and elimination has been developed and implemented. Any illicit discharges or illicit connections found or reported should be responded to according to this procedures manual.

4.2.3.2.4/5 Tracing the source of an illicit discharge:

Fort Jackson has an Illicit Discharge and Elimination Field Notebook that outlines the procedures for conducting investigations into the source of all identified illicit discharges, including approaches to requiring such discharges to be eliminated. This document will be updated to include the following requirements, if not already included.

At a minimum, after becoming aware of the illicit discharge, Fort Jackson will initiate an investigation to identify and locate the source of any continuous or intermittent non-stormwater discharge within 24 hours.

- a. *Fort Jackson will report immediately the occurrence of any dry weather flows believed to be an immediate threat to human health or the environment to SC DHEC Emergency Response, 1-888-481-0125.*
- b. *Illicit discharges suspected of being sanitary sewage and/or significantly contaminated must be considered a high priority and addressed within 24 hours.*
- c. *Investigations of illicit discharges suspected of being cooling water, wash water, or natural flows may be delayed until after all discharges suspected of having the potential for adversely impact either human health or water quality have been investigated, eliminated, and/or resolved.*
- d. *Fort Jackson will track all investigations to document at a minimum the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.*

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4.2.3.2.6 Documenting illicit discharges:

Illicit discharges are documented at Fort Jackson using GIS. When an illicit discharge is found and reported, the location of the illicit discharge is recorded in a GIS layer. A report is then generated with information about the illicit discharge including pictures and what was done to correct the illicit discharge. These reports are kept on file and will be submitted in each annual report. *If the source of the suspected illicit discharge is found to be a suspected non-compliance with an NPDES permit, the appropriate SC DHEC Regional Office must be notified.*

- a. *If an illicit discharge is found, but within six (6) months of the beginning of the investigation neither the source nor the same non-stormwater discharge has been identified/observed, then permittees must maintain written documentation for review by the permitting authority.*
- b. *If the observed discharge is intermittent, Fort Jackson will document that a minimum of three (3) separate investigations were made to observe the discharge when it was flowing. If these attempts are unsuccessful, Fort Jackson will maintain written documentation for review by the permitting authority. However, since this is an ongoing program, Fort Jackson should periodically recheck these suspected intermittent discharges.*

4.2.3.2.7 Corrective Action plan to eliminate illicit discharges:

A standard operating procedures manual for detecting and eliminating illicit discharges has been developed and will be updated and revised to include the following information for what is not already included. *Once the source of the illicit discharge has been determined, Fort Jackson shall:*

- a. *Notify the responsible party of the problem no later than 48 hours.*
- b. *Require the responsible party to conduct all necessary corrective actions to eliminate the non-stormwater discharge within 30 days. When, and if, elimination will take longer than 30 days, Fort Jackson shall require responsible parties to submit a plan with a schedule for elimination.*
- c. *Conduct a follow-up investigation and field screening, consistent with Part 4.2.3.4, to verify that the discharge has been eliminated upon being notified that the discharge has been eliminated.*
- d. *Document their follow-up investigations.*
- e. *Follow the SWMP ERP, once it is developed, and include the resulting enforcement actions in the subsequent annual report.*

4.2.3.2.8 Public reporting mechanics:

Fort Jackson will promote, publicize, and facilitate a reporting mechanism for the public and staff to report illicit discharges and establish and implement citizen request and response procedures. A phone number is available online for anyone on the Fort to report an illicit discharge so that it can be eliminated. This number is also publicized in a newsletter that is sent post-wide through emails. A Spill Prevention Control and Countermeasures Plan (SPCCP) document and an Installation Spill Contingency Plan (ISCP) document have established procedures for the control and cleanup of hazardous substance incidents of Fort Jackson. These written spill/dumping response procedures will be updated to include the procedure for responding to public notices of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response. Fort Jackson will conduct reactive inspections in response to complaints and follow-up inspections as needed to ensure that corrective measures have been implemented.

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4.2.3.2.9 Employee Training:

Fort Jackson will continue to implement a training program for all appropriate field staff, which, as a part of their normal job responsibilities, may come into contact with, or otherwise observe, an illicit discharge or illicit connection to the storm sewer system. Fort Jackson offers a 12 hour Environmental Compliance Officers Course (ECOC) every other month. Someone with this training must attend the course every three years to ensure compliance with updated requirements and procedures. Every organization, down to the company level (or civilian equivalent), must have a primary and alternate ECO. The ECO then trains those in their respective organization so that everyone, post-wide, is aware of the environmental procedures. Fort Jackson will keep track of all training and follow up training provided to address IDDE and to the staff trained in this MCM.

In order to meet the requirements of Minimum Measure #3, Fort Jackson has listed BMP's that focus on the detection and elimination of illicit discharges into the SMS4. Evaluation of the success of this minimum measure will be based on the level of implementation of the BMP's included in this minimum measure. The responsibility for implementation of this minimum measure is described with each BMP procedure. The screening procedures for the IDDE will be included in Appendix F once revisions are complete.

In order to meet the requirements of Minimum Measure #3, Fort Jackson will:

- Enforce Legal Authority to Address Illicit Discharges
- Update the Storm Sewer Map
- Identify Priority Areas for Illicit Discharges
- Identify Screening Points
- Conduct Field Screening (Dry Weather Screening)
- Revise Illicit Tracking Procedures
- Conduct Illicit Tracking
- Eliminate Illicit Discharges
- Document Illicit Discharge Investigations
- Assess Field Screening Procedures
- Provide Employee Training on Illicit Discharge Identification

Table 10 describes the components of Fort Jackson's Illicit Discharge Detection and Elimination (IDDE) program.

Table 10: Best Management Practices - Minimum Measure #3

| IDDE BMPs | | | |
|---|-------------------------------------|-------------------------|-----------------------------|
| Enforce Legal Authority to Address Illicit Discharges | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.3.2 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Fort Jackson will insert a statement about Illicit Discharge and Elimination policies into the revised Regulation 200-8. | As Needed | Once During Permit Term | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> • Revise, adopt, and enforce legal authority to address illicit discharges. | | | |

| | | | |
|--|-----------------------------|--|-----------------------------|
| Update Storm Sewer Map | | Completed: <input type="checkbox"/> | |
| | | Section: 4.2.3.2.1 | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Update the storm sewer map, as needed, to show the location of all outfalls and names and locations of all waters of the United States that receive discharge from those outfalls. | As Needed | As Needed | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Update storm sewer map as needed to show new outfalls. | | | |
| Identify Priority Areas | | Completed: <input type="checkbox"/> | |
| | | Section: 4.2.3.2.2 | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Create a map of illicit priority areas based on an identification of areas with a higher likelihood of illicit connections. The map will be updated annually. | Deadline: December 31, 2014 | Annually | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> A map which sets the boundaries for SMS4 Dry-Weather Screening. | | | |
| Update Dry Weather Field Screening Procedures | | Completed: <input type="checkbox"/> | |
| | | Section: 4.2.3.2.3 | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Update dry weather field screening and analytical monitoring procedures to detect and eliminate illicit discharges according to section 4.2.3.2.3. | Deadline: December 31, 2014 | Once During Permit Term | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Update dry weather field screening procedures. | | | |
| Identify Screening Points | | Completed: <input type="checkbox"/> | |
| | | Section: 4.2.3.2.3a | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Identify all field screening points within the priority area. Include a schedule for conducting the screening. | Deadline: July 1, 2015 | Annually | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> A list of all field screening points. A schedule for conducting the field screening. | | | |

| | | | |
|--|--|-------------------------|-----------------------------|
| Conduct Field Screening | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.3.2.3a | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Conduct dry weather flow screening at outfalls in the priority area and at known dry weather discharges. | Deadline: December 31, 2015 | Annually | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Locate potential illicit discharges in the priority area. | | | |
| Develop Illicit Tracking Procedures | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.3.2.4/5/8 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Fort Jackson will revise their procedures for tracking illicit discharges. The revisions to the Fort Jackson Illicit Discharge Detection and Elimination Field Notebook will include minimum investigation requirements in section 4.2.3.2.5. In addition, the illicit tracking procedures will include requirements for responding to public notices (section 4.2.3.2.8.a/b). | Deadline: July 1, 2015 | Once during permit term | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Develop illicit tracking procedures. | | | |
| Conduct Illicit Tracking/Determine Source of Illicit Discharge | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.3.2.4/5 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Fort Jackson will conduct illicit tracking at outfalls identified as potential illicit discharges by the field screening effort. | Confirmed illicit discharges will be tracked within a timeframe approved. | As Needed | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Determine source of potential illicit discharges identified during field screening. | | | |
| Eliminate Illicit Discharges | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.3.2.7 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Once the source of an illicit discharge has been determined, Fort Jackson will follow procedures (a-e) of section 4.2.3.2.7 of the permit to eliminate the illicit discharge | Confirmed illicit discharges will be eliminated within the timeframe listed in section 4.2.3.2.7.b | As Needed | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Documentation of eliminated illicit discharges. | | | |

| | | | |
|--|---|-------------------------|-----------------------------|
| Document Illicit Discharge Investigations | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.3.2.5/6 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Fort Jackson will document illicit discharge tracking and elimination activities to include the following information: <ul style="list-style-type: none"> • Date(s) the illicit discharge was observed • Results of the illicit investigation • Results of any follow-up investigations; • Date the investigation was closed. • Source of illicit discharge • Documentation for unresolved illicit tracking investigations in which no source is located. (as required by section 4.2.3.2.6.a of the permit) • Documentation for intermittent illicit discharges (as required by section 4.2.3.2.6.b of the permit) | Documentation will begin the same day when practicable but no later than 48hrs. | As Needed | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> • Document illicit tracking and elimination activities. | | | |
| Field Screening Assessment | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.3.2.3b | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Assess the effectiveness of the Field Screening program by the end of permit year 3. | Deadline: December 31, 2016 | Once during permit term | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> • A summary assessing the effectiveness of the Field Screening program. | | | |
| Employee Training | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.3.9 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Fort Jackson will implement a training program for all appropriate field staff. Fort Jackson will continue to hold Spill Prevention, Control, and Countermeasure (SPCC) Program trainings and Environmental Compliance Officers (ECO) courses to educate those on Fort Jackson of illicit discharges. | Start-up deadline: January 1, 2015 | Annually | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> • Provide IDDE training to appropriate field staff. This BMP will be implemented through training for Pollution Prevention in Section 4.2.6.5. | | | |

4.2.4 Construction Site Stormwater Runoff Control (Minimum Measure #4)

In order to meet the requirements of Minimum Measure #4, Fort Jackson has developed BMPs that focus on the reduction of pollutants in any storm water runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre will be considered if it is part of a larger common plan of development or sale that would disturb one acre or more. The BMPs listed below describe the legal authority mechanism (to the extent allowable under State, Tribal, or local law) which will be used to

require erosion and sediment controls; enforcement procedures and actions to ensure compliance; requirements for construction site operators to implement appropriate erosion and sediment control BMPs; requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site; procedures for site plan review which incorporate the consideration of potential water quality impacts; procedures for receipt and consideration of information submitted by the public; and procedures for site inspection and enforcement of control measures. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating attainable goals for the various BMP implementation steps or tasks. Table 11 describes the components of Fort Jackson’s construction site stormwater runoff control program:

Table 11: Minimum Measure #4 Permit Requirements

| |
|--|
| <p>4.2.4.4.1 Regulatory requirement for erosion and sediment controls:</p> |
| <p>Regulatory mechanisms that will require erosion and sediment controls at Fort Jackson include Fort Jackson Regulation 200-8, Army Regulation 200-1, and the Fort Jackson Land Disturbance Handbook. Erosion and sediment control requirements can be found in Fort Jackson’s Land Disturbance Handbook that was updated in May 2013 to comply with the most recent Construction General Permit (CGP). Fort Jackson’s Land Disturbance Handbook provides detail and guidance on the proper design, installation, and maintenance procedures for sediment/erosion control practices.</p> <p>All projects on Fort Jackson, regardless of size or scope, are reviewed under the National Environmental Policy Act (NEPA) program for any potential environmental concerns. The project proponent submits a Record of Environmental Consideration (REC) detailing the scope of the project, amount of land disturbance associated, and a map of the project location. Any projects with potential to impact surface water quality are reviewed by the stormwater program manager and comments are provided to the proponent regarding stormwater requirements that must addressed prior to project initiation.</p> |
| <p>4.2.4.4.2 Requirements for erosion and sediment controls and soil stabilization practices:</p> |
| <p>The requirements for erosion and sediment controls and soil stabilization practices can be found in great detail in Fort Jackson’s Land Disturbance Handbook. The design, installation and maintenance of erosions and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of the resulting Stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the construction site, while minimizing sediment discharges to the maximum extent practical. Some of the required BMPs that construction site operators will need to implement are permanent seeding with soil binders, erosion control blankets, surface roughening, continuous slope length reduction through terracing or diversions, gradient terraces, interceptor dikes and swales, grass-lined channels, level spreaders, rock ditch checks, seep berms, sediment dikes, silt fences, slope drains, and inlet and outlet protection.</p> |
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4.2.4.1.3 Requirements for pollution prevention measures:

Requirements for pollution prevention measures can be found in detail in the Fort Jackson Land Disturbance Handbook. Contractors performing construction activities at the fort are required to design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented, and maintained to:

- *Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;*
- *Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and*
- *Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.*

- *The following discharges from sites are prohibited:*
 - i. Wastewater from washout of concrete, unless managed by an appropriate control;*
 - ii. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials;*
 - iii. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance and,*
 - iv. Soaps or solvents used in vehicle and equipment washing.*

4.2.4.4.4 Requirements for Stormwater Pollution Prevention Plans (SWP3):

Fort Jackson will require each operator of a construction activity disturbing one acre and more to prepare and submit a Stormwater Pollution Prevention Plan (SWP3) to Fort Jackson for review and approval prior to project initiation. The requirements for the SWP3 can be found in the Land Disturbance Handbook.

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4.2.4.5 Review of SWP3:

Once a SWP3 is complete, it will be submitted to Fort Jackson for review and approval before initiating any construction activities on the proposed development site. The SWP3 will be reviewed by qualified individuals who are knowledgeable in the technical review of SWP3. Fort Jackson reserves the right to reject a SWP3 and request a revision to address any deficiencies. The SWP3 must meet the requirements that are defined in Fort Jackson's Land Disturbance Handbook. If approved, the plan then becomes the Final SWP3. If necessary, a revised SWP3 shall be completed to reflect any changes or modifications requested or required by Fort Jackson. The improved version of the SWP3 shall be resubmitted to Fort Jackson. Upon approval, this plan shall become the Final Stormwater Pollution Prevention Plan.

Fort Jackson will revise their existing SWP3 plan review process to include the following procedures that must be met:

- a. *Make clear to operators of construction activity that they are prohibited from commencing construction activity until they receive of written approval of the plans.*
- b. *Approve SWP3 that complies with the technical requirements of the effective NPDES General Permit for Storm Water Discharges from Construction Activities, SCR100000, or establish alternative technical criteria that are equally, or more, protective of water quality. If Fort Jackson elects to develop alternative technical criteria, a rationale statement will be included in the SWMP documenting how the control measures selected will provide protection of water quality.*
- c. *The SWP3 must include the rationale used for selecting control measures, including how the control measure protects a waterway or stormwater conveyance.*
- d. *Fort Jackson will use qualified individuals, knowledgeable in the technical review of SWP3 to conduct reviews.*
- e. *Document the review of each SWP3 plan using a checklist or similar process.*
- f. *Fort Jackson will develop procedures for SWP3 review, including the review of pre-construction site plans, for construction activity that discharge pollutant(s) of concern to TMDL waters and to waters on the 303(d) List of Impaired Waters, the SWP3 must identify potential water quality impacts the permitted discharges may have. The SWP3 shall limit sediment discharges to the MEP, shall protect water quality. Procedures for SWP3 review shall:
 - i. *Incorporate consideration of potential water quality impacts,*
 - ii. *Include the review of construction site plans,*
 - iii. *For construction projects that disturb less than 25 acres, carefully evaluate all selected BMPs and their ability to control the pollutant(s) of concern.*
 - iv. *For construction projects that disturb 25 acres or more, require a written quantitative and qualitative assessment showing that the selected BMP will control the discharge of the pollutant, or pollutants, of concern from construction and post construction within a TMDL watershed, or to a water on the 303(d) List of Impaired Waters, and,*
 - v. *Require that SWP3 prepared by construction activity applicants for SMS4 review and approval must demonstrate that stormwater discharges will neither cause nor contribute to a violation of water quality standards.**

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4.2.4.6 Site inspections:

Fort Jackson will verify that the items listed below are met in the procedures listed in the Fort Jackson Land Disturbance Handbook.

- a. *Fort Jackson currently maintains an inventory of all active construction projects. This inventory will be continuously updated as new projects are permitted and projects are completed. This inventory must contain relevant contact information for each project (e.g., name, address, phone, etc.), the size of the project and area of disturbance. Fort Jackson will make the inventory available to SC DHEC upon request. As a part of this inventory,*
 - i. *Fort Jackson will track the number of inspections for the inventoried construction sites throughout the reporting period to verify that the sites are inspected at the minimum frequencies required, and,*
 - ii. *Document inspections and enforcement activities for each site in the inventory.*
- b. *Fort Jackson will implement procedures for inspecting construction projects in accordance with the frequency listed below.*

All sites 5 acres or larger in size, all sites 1 acre or larger that discharge to a tributary listed by the state as an impaired water for sediment, turbidity, or BIO under the CWA section 303(d), and all sites determined to be a significant threat to water quality shall be inspected at the following times:*

- *All new approvals must be inspected initially within the first two weeks of commencement of land disturbing activity.*
- *All active sites shall be inspected at least monthly during construction.*
- *All inactive sites shall be inspected at least bi-monthly.*

All other construction sites with one acre or more of soil disturbance not meeting the above specified criteria shall have inspections at least once a month.

Once a notice of termination (NOT) is submitted by the contractor, the Fort will complete a final inspection for all permitted projects to ensure that all graded areas have reached final stabilization and that all temporary control measures are removed and permanent stormwater management BMP are permitted as required.

**In evaluating the threat to water quality, the following factors must be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-stormwater discharges; past record of non-compliance by the operators of the construction site; proximity to sensitive water bodies; and, other factors relevant to Fort Jackson.*

c. Fort Jackson will adequately inspect all phases of construction. At a minimum, inspections will occur following installation of initial BMPs, during active construction, and after final site stabilization.

d. Fort Jackson will have trained and qualified inspectors. Fort Jackson will also continue to follow, and revise as necessary, written procedures outlining the inspection and enforcement procedures.

Inspections of construction sites will, at a minimum:

- i. *Check for coverage under SCR100000 by requesting a copy of any application or Notice of Intent (NOI), the stamped approved stormwater pollution prevention plan or other relevant application form during initial inspections.*
- ii. *Review the applicable stormwater pollution prevention plan and conduct a thorough site inspection to determine if control measures have been selected, installed, implemented, and maintained according to the plan.*

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| <ul style="list-style-type: none"> iii. Assess compliance with Fort Jackson regulations and permits related to stormwater runoff, including the implementation and maintenance of designated minimum control measures. iv. Assess the effectiveness of control measures. v. Visually observe and record non-stormwater discharges, potential illicit connections, and potential discharge of pollutants in stormwater runoff. vi. Provide a written or electronic inspection report generated from findings in the field. |
| <p>4.2.4.7 Enforcement Response Plan (ERP):</p> |
| <p><i>Fort Jackson will develop an Enforcement Response Plan (ERP). The ERP will contain descriptions of how Fort Jackson will use specific type of responses to address various types of violations. The ERP will include, but is not limited to:</i></p> <ul style="list-style-type: none"> a. <i>Types of response;</i> <ul style="list-style-type: none"> i. <i>Verbal warnings,</i> ii. <i>Written notices, and</i> iii. <i>Escalated enforcement measures such as citations, stop work orders, etc.</i> b. <i>Specific strategies for escalating enforcement response, where necessary, to address persistent, repeat or escalating violations.</i> c. <i>Ensure ERP is reasonably effective in reducing pollutant discharges to the MEP and to protect water quality.</i> |
| <p>4.2.4.8 MS4 Staff Training:</p> |
| <p><i>Fort Jackson will ensure that all staff, whose primary job duties are related to implementing the construction stormwater program, including permitting, plan review, construction site inspections, and enforcement, is trained to conduct these activities.</i></p> |
| <p>4.2.4.9 Construction Site Operator and Public Involvement:</p> |
| <p>4.2.4.9.a Construction Operator Education:</p> |
| <p><i>Contractors are required to have a pre-construction meeting before the project begins and feedback from construction contractors is on-going throughout the project. Fort Jackson will continue to revise and implement an effective communication process with construction contractors to educate them on areas in which improvements are needed and to enforce any required actions.</i></p> |
| <p>4.2.4.9.b Public Involvement:</p> |
| <p><i>Fort Jackson will implement procedures for receipt and consideration of information submitted by the public. The Environmental Division phone number is available for those in Fort Jackson to have input and will continue to be active.</i></p> |

In order to meet the requirements of Minimum Measure #4, Fort Jackson has listed BMP's that focus on the reduction of pollutants in stormwater runoff to the SMS4 from construction activities that result from a land disturbance greater than or equal to one acre. Fort Jackson will continue and improve existing BMP's that provide assistance and ensure compliance through routine inspections. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating

attainable goals for the various BMP implementation steps or tasks. In order to meet the requirements of Minimum Measure #4, Fort Jackson will:

- Update Pollution Prevention BMP Requirements
- Revise SWP3 Submittal & Review Requirements
- Develop SWP3 Review Procedures for Discharges to Impaired Waters
- Modify and Maintain a Construction Site and Site Inspection Inventory
- Develop/Modify Site Inspection Procedures
- Develop Section of ERP for Construction Activities
- Construction Operator Training/Education

Table 12 describes the components of Fort Jackson’s construction site stormwater runoff control program:

Table 12: Best Management Practices - Minimum Measure #4

| CONSTRUCTION RUNOFF BMPs | | | | |
|---|-----------------------------|--|-----------------------------|-----------------------------|
| Update Pollution Prevention Requirements | | Completed: <input type="checkbox"/> | | |
| | | Section: 4.2.4.4.3 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party | |
| Update the Stormwater Regulation in Regulation 200-8 to include all requirements for Pollution Prevention Measures listed in Section 4.2.4.4.3. Fort Jackson also requires the following Acts/Regulations to be enforced, related to construction: <ul style="list-style-type: none"> • National Environmental Policy Act (NEPA) • American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 189.1-2011 Section 5 • AR 200-1 | Deadline: December 31, 2014 | Once during permit term | Directorate of Public Works | |
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> • Add Pollution Prevention requirements to the Stormwater Regulation. | | | | |
| Revise SWP3 Submittal & Review Requirements | | Section: 4.2.4.4.5.b/c | | |
| Milestone(s) | Completed | Schedule/Deadline | Frequency | Responsible Party |
| Update the SWP3 guidelines in Section 2 in the Fort Jackson Land Disturbance Handbook to ensure SWP3 submittals include a rationale used for selecting control measures, including how the control measure protects a waterway or stormwater conveyance. | <input type="checkbox"/> | Deadline: June 30, 2015 | Once during permit term | Directorate of Public Works |
| Update plan review procedures to address new requirements listed above. | <input type="checkbox"/> | | Once during permit term | Directorate of Public Works |
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> • Update SWP3 submittal requirement documents and corresponding plan review procedures to include items listed above. | | | | |

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|--|-----------------------------|--|-----------------------------|
| Develop SWP3 Review Procedures for Discharges to Impaired Waters | | Completed: <input type="checkbox"/> | |
| | | Section: 4.2.4.4.5.f | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Fort Jackson will develop procedures outlined in section 4.2.4.5.f for SWP3 review for construction activity that discharge pollutant(s) of concern to TMDL waters and to waters on the 303(d) List of Impaired Waters. | Deadline: December 31, 2015 | Once during permit term | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Develop plan review procedures for construction discharges to impaired waters. | | | |
| Modify and Maintain Construction Site and Site Inspection Inventory | | Completed: <input type="checkbox"/> | |
| | | Section: 4.2.4.6(a) | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Fort Jackson will maintain an inventory of all active construction projects. The inventory will be edited to include information for: <ul style="list-style-type: none"> Relevant contact information The size of the project Area of disturbance Number of inspections by Fort Jackson for each construction site Inspection results and enforcement actions | Deadline: December 31, 2014 | Inventory will be updated as needed | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Develop and maintain a database that provides general site information and ensures appropriate site inspections are conducted by the construction operator. | | | |
| Modify Site Inspection Procedures | | Completed: <input type="checkbox"/> | |
| | | Section: 4.2.4.6(b-d) | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Fort Jackson will modify Chapter 4 of the Fort Jackson Land Disturbance Handbook to be in compliance with permit section 4.2.4.6(b-d). | Deadline: December 31, 2014 | Once during permit term | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Modify the site inspection procedures that includes the items listed above. | | | |
| ERP for Construction Activities | | Completed: <input type="checkbox"/> | |
| | | Section: 4.2.4.7 | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Develop enforcement responses for permit violations and SWP3 violations. | Deadline: December 31, 2014 | Once during permit term | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Develop an ERP for construction activities. | | | |

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|---|--|------------------|-----------------------------|
| Construction Operator Training/Education | Completed: <input type="checkbox"/> | | |
| | Section: 4.2.4.9 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Fort Jackson will ensure that all staff, whose primary job duties are related to implementing the construction stormwater program including permitting, plan review, construction site inspections, and enforcement is trained to conduct these activities. | Throughout Permit Term Beginning in Year 2 | Annually | Directorate of Public Works |
| Measurable Goal: | | | |
| <ul style="list-style-type: none"> Conduct trainings for all required staff. | | | |

4.2.5 Post-Construction Stormwater Management for New Development and Redevelopment (Minimum Measure #5)

In order to meet the requirements of Minimum Measure #5, Fort Jackson has listed the following BMPs regarding the programs and processes that apply to the post-construction stormwater management for new development and redevelopment requirements. The post construction stormwater management program is designed to give Fort Jackson the authority to require structural and non-structural storm water quality BMPs on sites being developed. Fort Jackson will operate and maintain all BMPs on post. Fort Jackson’s Land Disturbance Handbook defines the operation and maintenance activities for each permanent BMP. Table 13 describes the components of the Fort’s Post-Construction stormwater management program:

Table 13: Minimum Measure #5 Permit Requirements

| |
|--|
| 4.2.5.1. Post-Construction Stormwater Management Program: |
| Fort Jackson will continue to provide design requirements to control stormwater discharges from new development and redeveloped sites that disturb at least one acre that discharge into an SMS4. This program will minimize water quality impacts to the MEP. The inspection and reporting requirements for post construction that are currently in place at the fort are defined in Fort Jackson’s Land Disturbance Handbook. |
| 4.2.5.2 Site Performance Standards: |
| Fort Jackson will establish, implement, and enforce a requirement that owners or operators of new development and redeveloped sites discharging to the MS4, which disturb greater than or equal to one acre (including projects that disturb less than one acre that are part of a LCP), design, install, implement, and maintain stormwater control measures that approximate pre-development conditions to the MEP and protect water quality. Once the performance standard is established, the Fort Jackson Land Disturbance Handbook will be updated. |
| 4.2.5.3 Site Plan Review: |
| Site plans are reviewed according to the “Current Construction Project Review & Enforcement Procedures” flow chart that can be found in Fort Jackson’s Land Disturbance Handbook. Once the site performance standards are revised, documents regarding site plan review will be updated to include project review, approval, and enforcement procedures. Fort Jackson will conduct site plan reviews of all new development and redeveloped sites which will disturb greater than or equal to one acre and discharge to the MS4 (including sites that disturb less than one acre that are part of a LCP). The site plan review must specifically address how the project applicant meets the site performance standards in Part 4.2.5.2 and how the project will ensure long-term maintenance as required in Part 4.2.5.4. |

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| 4.2.5.4 | Long-Term Maintenance of Post-Construction Stormwater Control Measures: |
| <p><i>Fort Jackson will ensure that all structural stormwater control measures installed and implemented to meet the site performance standards will be maintained in perpetuity. Fort Jackson will ensure the long-term maintenance of structural stormwater control measures installed.</i></p> <p>The post-construction stormwater quality control BMPs shall be constructed and implemented in compliance with Fort Jackson's Land Disturbance Handbook. Fort Jackson will perform inspections of BMPs to ensure proper function. If inspection reports indicate that the stormwater control is not functioning as expected within one year after construction activities have concluded, the contractor/design professional shall be required to correct the problem. All constructed stormwater quality BMPs shall require an as-built certification to ensure proper size and water quality volume. All pre-fabricated stormwater quality BMPs shall require a manufacturer's certification that the correct structure is installed properly.</p> | |
| 4.2.5.5 | Inventory of Post-Construction Stormwater Control Measures: |
| <p>A program called GILware is being used to document the location and other information about all BMPs that are constructed in Fort Jackson. This stores the inventoried BMPs in a database and can be updated as new BMPs are constructed. <i>Fort Jackson will maintain this inventory of post-construction structural stormwater control measures installed and implemented at new development and redeveloped sites. At a minimum, this inventory should contain all BMP constructed since the effective date starting with effective date of this permit.</i></p> | |
| 4.2.5.6 | Inspections and Enforcement: |
| 4.2.5.6.1 | Inspection Procedures: |
| <p><i>Fort Jackson will conduct inspections of each project site covered under Part 4.2.5.2 performance standards at least one time during the permit term to ensure that all stormwater control measures are operating correctly and are being maintained as required consistent with its applicable maintenance agreement.</i></p> <p>The Directorate of Public Works or an authorized representative/designee (inspector) may enter to all properties for regular inspections, periodic investigations, and enforcement according the Fort Jackson's Land Disturbance Handbook.</p> | |
| 4.2.5.6.2 | Post-Construction Notification: |
| <p><i>Within 30 days of completing of construction of any project required to meet the Part 4.2.5.2 performance standards, Fort Jackson must conduct a post-construction inspection to verify that BMP's have been installed as per approved plans. After contractors submit a Notice of Termination (NOT) to the Directorate of Public Works (DPW), DPW will conduct the post-construction inspection.</i></p> | |
| 4.2.5.6.3 | Inspection Reports: |
| <p><i>Fort Jackson will document its inspection findings in a database to be used for reporting. Fort Jackson will document and maintain records of inspection findings and enforcement actions and make them available for review by the permitting authority.</i></p> | |

Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Measurable goals for each BMP were selected by formulating attainable goals for the various BMP implementation steps or tasks. In order to meet the requirements of Minimum Measure #5, Fort Jackson will:

- Continue Certifications and Programs
- Modify Site Performance Standards
- Develop Long Term Maintenance Requirements for Post Construction BMPs
- Create Post Construction BMP Inventory
- Develop Post Construction BMP Inspection Program

Table 14 describes the components of Fort Jackson’s Post-Construction stormwater management program:

Table 14: Best Management Practices – Minimum Measure #5

| POST CONSTRUCTION RUNOFF BMPs | | | | |
|---|-----------------------------|--|-----------------------------|-----------------------------|
| Continue Certifications and Programs | | Completed: <input type="checkbox"/> | | |
| | | Section: 4.2.5.1 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party | |
| Fort Jackson currently follows, and will continue to follow, the criteria and standards listed below. <ul style="list-style-type: none"> LID/LEED Certifications Unified Facilities Criteria (UFC) 3-210-10 Low Impact Development ASHRAE 189.1 Sustainability Management System (SMS) | As Needed | Annually | Directorate of Public Works | |
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> Continuing to follow the above certifications and programs on Fort Jackson. | | | | |
| Modify Site Performance Standards | | Completed: <input type="checkbox"/> | | |
| | | Section: 4.2.5.2 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party | |
| Develop and adopt site performance standards and a procedure for site designers to comply. | Deadline: December 31, 2015 | Once during permit term | Directorate of Public Works | |
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> Update post-construction site performance standards to adopt the EISA methodology. | | | | |
| Post Construction BMP Inventory | | Section: 4.2.5.5 | | |
| Milestone(s) | Completed | Schedule/Deadline | Frequency | Responsible Party |
| Develop an inventory of all post construction BMPs constructed since the effective date of permit SCR030000 (January 1, 2014). | <input type="checkbox"/> | Deadline: December 31, 2014 | Once during permit term | Directorate of Public Works |
| Update Post Construction BMP Inventory. | N/A | Throughout Permit Term Beginning in Year 2 | Annually | Directorate of Public Works |
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> Provide an inventory of post construction BMPs. | | | | |

| Post Construction BMP Inspections Program | | Completed: <input type="checkbox"/> | | |
|---|--------------------------|--|-------------------------|-----------------------------|
| | | Section: 4.2.5.4/6 | | |
| Milestone(s) | Completed | Schedule/Deadline | Frequency | Responsible Party |
| Develop procedures and forms for post construction BMP maintenance inspections. | <input type="checkbox"/> | Deadline: December 31, 2015 | Once during permit term | Directorate of Public Works |
| Conduct post construction BMP inspection within 30 days of construction completion to ensure BMP is installed per approved plans. | N/A | Throughout Permit Term Beginning in Year 2 | Annually | Directorate of Public Works |
| Update procedures and forms for post construction BMP installation inspections. | <input type="checkbox"/> | Deadline: December 31, 2017 | Once during permit term | Directorate of Public Works |
| Conduct post construction BMP inspections to ensure BMPs are maintained properly. | <input type="checkbox"/> | Throughout Permit Term Beginning in Year 2 | Once during permit term | Directorate of Public Works |
| Document and maintain records of inspection findings and enforcement actions and make them available for review by the permitting authority. | N/A | Throughout Permit Term Beginning in Year 2 | Annually | Directorate of Public Works |
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> Develop procedures and forms for Post Construction BMP maintenance inspections and include procedures in this document. | | | | |
| <ul style="list-style-type: none"> Inspect all post construction BMPs within 30 days of construction completion. | | | | |
| <ul style="list-style-type: none"> Update procedures and forms for Post Construction BMP installation inspections and include procedures in this document. | | | | |
| <ul style="list-style-type: none"> Inspect appropriate construction sites to ensure Post Construction BMPs are maintained and operating correctly. | | | | |
| <ul style="list-style-type: none"> Provide documentation of Post Construction BMP inspections. | | | | |

4.2.6 Pollution Prevention / Good Housekeeping (Minimum Measure #6)

In order to meet the requirements of Minimum Measure #6, Fort Jackson has focused on training and on the prevention or reduction of pollutant runoff from Fort operations. The BMPs describe the use of available training materials available from the EPA, the State, or other organizations; specific Fort operations that are impacted by the proposed operation and maintenance programs (BMPs); a list of industrial facilities on post which require other storm water discharge permits; maintenance activities, schedules and long term inspection procedures for controls to reduce floatables and other pollutants; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, parking lots, maintenance and storage yards, waste transfer stations, and fleet or maintenance shops with outdoor storage areas; procedures for the proper disposal of waste removed from the MS4 and Fort operations. Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. Table 15 describes the components of Fort Jackson's pollution prevention/good housekeeping for the operations program:

Table 15: Minimum Measure #6 Permit Requirement

| | |
|--|---|
| 4.2.6.1 | Development of a Municipal Facility and Stormwater Control Inventory: |
| <p>Fort Jackson owns all facilities and stormwater controls, as well as industrial facilities. <i>Fort Jackson will update and maintain an inventory of stormwater controls that are not covered under a separate general or individual NPDES permit (i.e. industrial, solid waste, etc.). Fort Jackson will also include a list of industrial facilities they own that are subject to SCDHEC NPDES General Permit for Storm Water Discharges Associated with Industrial Activity (SCR00000) or individual NPDES permits for discharges of stormwater associated with industrial activity that ultimately discharge to Fort Jackson. The SCDHEC permit number or a copy of the Industrial NOI form for each facility will be included.</i></p> | |
| 4.2.6.2 | Municipally-owned or operated facility assessment: |
| 4.2.6.2.1 | Comprehensive assessment of pollutant discharge potential: |
| <p><i>Fort Jackson will develop a comprehensive assessment of all Fort owned or operated facilities that were identified in Part 4.2.6.1 at least once during the permit term and include it in the reapplication for their potential to discharge pollutants in stormwater. The assessment may be integrated into Fort Jackson's Internal Environmental Performance Assessment System (EPAS) Procedures. Currently, Fort Jackson's Internal EPAS Team conducts multi-media environmental inspections of all facilities on post. High priority facilities are inspected once or twice a year, with lower priority facilities inspected every two to three years.</i></p> | |
| 4.2.6.2.2 | Identification of high priority facilities: |
| <p>Once Fort Jackson has compiled a list of the Fort-owned facilities and industrial facilities present in the cantonment area, the facilities will be categorized as high, medium, and low priority based on their potential to generate stormwater pollutants.</p> | |
| 4.2.6.2.3 | Documentation of comprehensive assessment results: |
| <p><i>Fort Jackson will document the results of the assessments and maintain copies of all site evaluation checklists used to conduct the comprehensive assessment. The documentation will include the results of the permittee's initial assessment, any identified deficiencies and corrective actions taken.</i></p> | |
| 4.2.6.3 | Annual comprehensive inspections of high priority facilities: |
| <p><i>Starting no later than 24 months from the effective date of coverage and at least once per year thereafter, a comprehensive inspection of "high priority" facilities that will be determined in Part 4.2.6.2.2, including all stormwater controls, will be performed by Fort Jackson. Fort Jackson will pay specific attention to waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar potential pollutant-generating areas. The yearly inspection results will be documented and records will be maintained by Fort Jackson. The inspection report will also include any identified deficiencies and the corrective actions taken to fix the deficiencies.</i></p> | |
| 4.2.6.4 | Storm Sewer System Maintenance Activities – MS4 Maintenance: |
| 4.2.6.4.1 | Assessment/prioritization of MS4 catch basins: |
| <p><i>Fort Jackson will prioritize their owned and operated storm water management systems/structures and implement a maintenance schedule.</i></p> | |

| | |
|--|--|
| 4.2.6.4.2 Municipal activities and operation:: | <i>Fort Jackson will develop a set of pollution prevention measures that, when applied during Fort operation and maintenance activities, will reduce the discharge of pollutants in stormwater. Operation and maintenance activities to be considered include, but are not limited to, pavement and rights-of-way maintenance, bridge maintenance, cold weather operations, and sponsored events.</i> |
| 4.2.6.4.3 Maintenance of municipally-owned and/or maintained structural stormwater controls: | <i>Fort Jackson will inspect, and maintain, wherever and whenever necessary, all Fort-owned or maintained structural stormwater controls. The permittee must also maintain all Fort owned green infrastructure practices through regularly scheduled maintenance activities.</i> |
| 4.2.6.5 Employee Training and Education Requirements: | <p><i>Fort Jackson will develop an annual employee training program for appropriate employees involved in implementing pollution prevention and good housekeeping practices.</i></p> <p><i>This annual training will include a general stormwater education component, any new technologies, operations, or responsibilities that arise during the year, and the SMS4 general permit requirements that apply to the staff being trained.</i></p> <p><i>A description of how the program will be maintained for review by the permitting authority.</i></p> <p><i>Fort Jackson will also identify and track all personnel requiring training and records must be maintained.</i></p> <p><i>Training will begin within the first year from the effective date of permit authorization.</i></p> |
| 4.2.6.6 Requirements for Contractor Oversight: | <i>Contractors that are hired at Fort Jackson to perform maintenance activities will be contractually required to comply with the SMS4 stormwater control measures, good housekeeping practices, and facility-specific stormwater management procedures. Fort Jackson will provide oversight of contractor activities to ensure that contractors are using appropriate control measures and procedures.</i> |

Evaluation of the success of this minimum measure will be through careful analysis of the measurable goals for each BMP included in this minimum measure. In order to meet the requirements of Minimum Measure #6, Fort Jackson will:

- Develop a Facility Inventory
- Conduct Assessment of Non-Permitted Fort Facility & Identify High Priority Facilities
- Conduct High Priority Facility Inspections
- Prioritize Stormwater Management Systems/Structures
- Develop and Implement Pollution Prevention Measures for Operation and Maintenance Activities
- Inspect and Maintain Owned Structural Controls (Stormwater BMPs)
- Conduct Pollution Prevention and Good House Keeping Employee Training

Table 16 describes the components of Fort Jackson’s pollution prevention/good housekeeping for Fort operations program:

Table 16: Best Management Practices – Minimum Measure #6

| POLLUTION PREVENTION / GOOD HOUSEKEEPING BMPS | | | | |
|--|-----------------------------|--|-----------------------------|-----------------------------|
| Municipal Facility Inventory | | Completed: <input type="checkbox"/> | | |
| | | Section: 4.2.6.1.1 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party | |
| Develop an inventory of all owned facilities and stormwater controls that are not covered under a separate NPDES permit, with the potential to impact stormwater runoff. In addition, include a list of all Fort owned facilities that are covered under a separate NPDES permit. | Deadline: December 31, 2014 | Once during the permit term | Directorate of Public Works | |
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> An inventory of non-permitted facilities. A list of all Fort owned facilities that are covered under a separate NPDES permit. | | | | |
| Assessment of Non-Permitted Municipal Facilities | | Section: 4.2.6.2 | | |
| Milestone(s) | Completed | Schedule/Deadline | Frequency | Responsible Party |
| Create an evaluation checklist that will be used to conduct the comprehensive GIS assessment. | <input type="checkbox"/> | Deadline: December 31, 2014 | Once during permit term | Directorate of Public Works |
| Conduct GIS assessment based on type of facility/use, locations to waterbody, BMPs to rank facilities, and other factors. | <input type="checkbox"/> | Deadline: December 31, 2014 | Once during permit term | Directorate of Public Works |
| Based on the results of the GIS assessment, identify high priority facilities and document results. | <input type="checkbox"/> | Deadline: June 30, 2015 | Once during permit term | Directorate of Public Works |
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> An evaluation checklist for facility assessment. Identify high priority facilities. Documentation of results. | | | | |
| Conduct High Priority Facility Inspections | | Section: 4.2.6.3 | | |
| Milestone(s) | Completed | Schedule/Deadline | Frequency | Responsible Party |
| Create facility inspection report template with sections for identified deficiencies and corrective action taken for each site inspection. | <input type="checkbox"/> | Deadline: December 31, 2015 | Once during permit term | Directorate of Public Works |
| Conduct facility site inspections including evaluations of potential "pollutant generating" areas. | N/A | Throughout Permit Term Beginning in Year 3 (January 1, 2016) | Annual | Directorate of Public Works |

| | | | | |
|--|--------------------------|-----------------------------|-------------------------|-----------------------------|
| Document inspection reports. | N/A | Deadline: January 1, 2018 | Annual | Directorate of Public Works |
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> A high priority facility inspection report form. | | | | |
| <ul style="list-style-type: none"> Conduct facility inspections and determine potential “pollutant generating” areas at high priority facilities. | | | | |
| <ul style="list-style-type: none"> Documentation of facility inspection report forms. | | | | |
| Prioritize MS4 Catch Basins | | Section: 4.2.6.4.1 | | |
| Milestone(s) | Completed | Schedule/Deadline | Frequency | Responsible Party |
| Prioritize stormwater management systems / structures. | <input type="checkbox"/> | Deadline: March 1, 2016 | Once during permit term | Directorate of Public Works |
| Implement a maintenance schedule for stormwater management systems/structures. | <input type="checkbox"/> | Deadline: May 1, 2016 | Once during permit term | Directorate of Public Works |
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> A schedule to maintain the stormwater management system. | | | | |
| Develop and Implement Pollution Prevention Measures for Operation and Maintenance Activities | | Section: 4.2.6.4.2 | | |
| Milestone(s) | | Schedule/Deadline | Frequency | Responsible Party |
| Develop a written set of pollution prevention measures for Fort operation and maintenance activities. | <input type="checkbox"/> | Deadline: June 1, 2015 | Once during permit term | Directorate of Public Works |
| Implement pollution prevention measures for Fort operation and maintenance activities. | <input type="checkbox"/> | Deadline: December 31, 2015 | Throughout permit term | Directorate of Public Works |
| <p>Fort Jackson will continue to implement the following programs related to pollution prevention measures:</p> <ul style="list-style-type: none"> Animal Waste Program and Regulation (FJ Regulation 40-12) regarding pet waste Street Cleaning Program Environmental Performance Assessment System (EPAS) Operating the Reuse Center Continuing to operate the Hazardous Waste Storage Facility Continuing the Hazardous Material Management Program Continuing the Recycle Center and the Qualified Recycle Program Continuing the Hazardous Substance Management Program Continuing the Oil & Grease Collection Program | N/A | Ongoing | Annually | Directorate of Public Works |

| | | | | |
|---|--------------------------|------------------------------------|-------------------------|-----------------------------|
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> A written set of pollution prevention measures for operation and maintenance activities. Documentation of program and assessment annual summaries. | | | | |
| Inspect and Maintain Owned Structural Controls (stormwater BMPs) | | Section: 4.2.6.4.3 | | |
| Milestone(s) | Completed | Schedule/Deadline | Frequency | Responsible Party |
| Create a structural control inspection and maintenance form. | <input type="checkbox"/> | Deadline: December 31, 2014 | Once during permit term | Directorate of Public Works |
| Conduct inspections for structural controls. | N/A | Ongoing | Annually | Directorate of Public Works |
| Perform necessary maintenance for structural controls. | N/A | Ongoing | Annually | Directorate of Public Works |
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> A structural control inspection and maintenance form. Conduct inspections for structural controls. Conduct maintenance for structural controls. Documentation of completed inspection and maintenance forms. | | | | |
| Conduct Pollution Prevention and Good House Keeping Employee Training | | Section: 4.2.6.5 | | |
| Milestone(s) | Completed | Schedule/Deadline | Frequency | Responsible Party |
| Update the annual employee training program for appropriate employees involved in implementing pollution prevention and good housekeeping practices. Include training for IDDE. | <input type="checkbox"/> | Deadline: December 31, 2014 | Once during permit term | Directorate of Public Works |
| Conduct pollution prevention and good housekeeping training. | N/A | Start-up deadline: January 1, 2015 | Annually | Directorate of Public Works |
| Create a list of employees that have been identified for pollution prevention training. | N/A | Ongoing | Annually | Directorate of Public Works |
| Measurable Goal: | | | | |
| <ul style="list-style-type: none"> A written pollution prevention employee training plan/program. A list of employees participating in the training program. | | | | |

4.5 Reviewing and Updating Storm Water Management Plans

Table 17: Reviewing and Updating SWMP

| SWMP REQUIREMENTS | | | |
|--|-------------------------------------|-------------|-----------------------------|
| Update Stormwater Management Plan | Completed: <input type="checkbox"/> | | |
| | Section: 4.5.1 & 4.5.2 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Review and revise the SWMP document to keep it up to date during the term of the permit. | Deadline: December 31, 2018 | Annually | Directorate of Public Works |
| Stormwater Management Plan Updates Required by SCDHEC | Completed: <input type="checkbox"/> | | |
| | Section: 4.5.3 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| SCDHEC requested changes to the SWMP. | Deadline: December 31, 2018 | As Required | Directorate of Public Works |

This SWMP, as a living document, will be updated and revised throughout the permit term. In accordance with Section 4.5.2 of the general SMS4 permit, additions to this permit will be made at any time, without any required notice to SCDHEC. Any changes intended to replace an ineffective or unfeasible BMP with an alternate BMP will be submitted in written form to SCDHEC at any time. Additionally, SCDHEC may request that Fort Jackson make changes to this document at any time.

Any changes intended to replace an ineffective or unfeasible BMP with an alternate BMP will be requested and submitted in written form to SCDHEC at any time. Unless denied by SCDHEC, changes proposed in accordance with the criteria below will be deemed approved and may be implemented 60 days from submittal of the request. If request is denied, SCDHEC will send Fort Jackson a written response giving a reason for the decision. The modification requests must include the following:

- *An analysis of why the BMP is ineffective or infeasible (including cost prohibitive),*
- *Expectations on the effectiveness of the replacement BMP, and*
- *An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.*

Additionally, SCDHEC may request Fort Jackson to make changes to the SWMP at any time to:

- *Address documented impacts on receiving water quality caused, or contributed to, by discharges from the SMS4;*
- *Include more stringent requirements necessary to comply with new Federal statutory or regulatory requirements; or*
- *Include such other conditions deemed necessary by the Department to comply with the goals and requirements of the Clean Water Act.*
- *Changes requested by SCDHEC must be made in writing, set forth the time schedule for the Fort to develop the changes, and offer the Fort the opportunity to propose alternative program changes to meet the objective of the requested modification. All changes required by SCDHEC will be made in accordance with South Carolina Water Pollution Control Permits Regulation 61-9 124.5, 122.62, or as appropriate 122.63.*

5.3 Reporting

Table 18: Reporting

| REPORTING | | | |
|--|-------------------------------------|-----------|-----------------------------|
| 1st Report | Completed: <input type="checkbox"/> | | |
| | Section: 5.3 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Complete and Submit 1st Report (covering years 1 and 2). | Deadline: April 01, 2016 | Once | Directorate of Public Works |
| 2nd Report | Completed: <input type="checkbox"/> | | |
| | Section: 5.3 | | |
| Milestone(s) | Schedule/Deadline | Frequency | Responsible Party |
| Complete and Submit 2nd Report (covering years 3 and 4). | Deadline: July 4, 2018 | Once | Directorate of Public Works |

Unless DHEC requires more frequent reports, reports will be submitted based on the following schedule:

1. *The first report covering years 1 and 2 must be submitted to the Department twenty-seven (27) months after the effective date of the permit.*
2. *The following report, covering years 3 and 4 shall be submitted 180 days before the permit expiration date as part of the re-notification.*
3. *While, and if the expired permit is continued, reports are due every year on the anniversary date of the expired permit.*

All reports shall be sent to the address below unless the Department instructs permittees to submit via alternate mechanisms (i.e. electronic mechanisms):

SCDHEC Bureau of Water
Water Pollution Compliance & Enforcement
2600 Bull Street
Columbia, SC 29201-1708

All reports will include:

- *The status of Fort Jackson's compliance with permit conditions, an assessment of the appropriateness of the identified BMP under Part 4, progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and the measurable goals for each of the minimum control measures;*
- *Results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;*

- *A summary of the stormwater activities Fort Jackson plans to undertake during the next reporting cycle (including an implementation schedule);*
- *Proposed changes to Fort Jackson's SWMP, including changes to any BMP or any identified measurable goals that apply to the program elements; and*
- *Notice that Fort Jackson is relying on another entity to satisfy some of their permit obligations (if applicable).*
- *Information requested in the SMS4 general permit including, but not limited to: sections 1.4.7, 3.1.1.1, 3.2.1.1, 3.2.1.2.2, 3.3.6, 4.1.6 and in the additional conditions applicable to NPDES MS4 permits contained in Appendix B of the SMS4 general permit.*

Appendix A
Fort Jackson
Revisions Sheet

Appendix B

Deadlines for Fort Jackson Associated with SWMP

| SWMP Requirements | | | | | |
|---|---------------|--|-----------------|-------------------|-------------------------|
| Measure | Section | Brief Description | Start Date | Deadline | Frequency |
| SWMP | 4.1.2 | Develop and Implement SWMP | January 1, 2014 | July 1, 2014 | Once during permit term |
| Regulation | 4.1.3 | Update Stormwater Management Regulation | July 1, 2014 | January 1, 2015 | Once during permit term |
| Enforcement | 4.1.5 | Implement an Enforcement Response Plan (ERP) | July 1, 2014 | January 1, 2015 | Once during permit term |
| 1 st Report | 5.3 | Complete and Submit 1st Report (covering years 1 and 2) | n/a | April 01, 2016 | Once during permit term |
| TMDL Monitoring and Assessment | 3.2 | Complete and Submit TMDL Monitoring and Assessment Plan for Existing TMDLs | July 1, 2014 | December 31, 2014 | Once during permit term |
| TMDL Monitoring/ Sampling | 3.2.1.2.1 | Initiate Sampling for Existing TMDLs | July 1, 2014 | June 30, 2015 | Once during permit term |
| TMDL Implementation and Analysis | 3.3 | Complete and Submit TMDL Implementation and Analysis Plan for Existing TMDLs | July 1, 2014 | December 31, 2017 | Once during permit term |
| 2 nd Report | 5.3 | Complete and Submit 2nd Report (covering years 3 and 4) | n/a | July 4, 2018 | Once during permit term |
| NOI | 2.5 | Deadline to submit a re-application | n/a | July 4, 2018 | Once during permit term |
| Minimum Control Measure Requirements Year 1 - 2014 | | | | | |
| Measure | Section | Brief Description | Start Date | Deadline | Frequency |
| PEO | 4.2.1.1.6 | Develop/Update Campaign Materials | July 1, 2014 | December 31, 2014 | Once during permit term |
| PIP | 4.2.2.1.2 | Provide Access to Information for the SWMP | July 1, 2014 | December 31, 2014 | Once during permit term |
| IDDE | 4.2.3.2.2 | Identify Year 2 Priority Areas | July 1, 2014 | December 31, 2014 | Annually |
| IDDE | 4.2.3.2.2.a.i | Identify Year 2 Screening Points | July 1, 2014 | July 1, 2015 | Annually |
| IDDE | 4.2.3.2.3 | Update Dry Weather Field Screening Procedures | July 1, 2014 | December 31, 2014 | Once during permit term |
| CSR | 4.2.4.4.3 | Update Pollution Prevention Requirements | July 1, 2014 | December 31, 2014 | Once during permit term |
| CSR | 4.2.4.6.a | Modify Site Inspection Inventory | July 1, 2014 | December 31, 2014 | Once during permit term |
| CSR | 4.2.4.6.a | Maintain Site Inspection Inventory | Ongoing | December 31, 2014 | Annually |
| CSR | 4.2.4.6.b-d | Develop/Modify Site Inspection Procedures | July 1, 2014 | December 31, 2014 | Once during permit term |
| PCR | 4.2.5.6.2 | Develop Post Construction BMP Installation Inspection Procedures | July 1, 2014 | December 31, 2014 | Once during permit term |
| PCR | 4.2.5.6.1 | Develop Post Construction BMP Maintenance Inspection Procedures | July 1, 2014 | December 31, 2014 | Once during permit term |

| PCR | 4.2.5.5. | Develop a Post Construction BMP Inventory | July 1, 2014 | December 31, 2014 | Once during permit term |
|---------------|---------------|--|-----------------|-------------------|-------------------------|
| Measure | Section | Brief Description | Start Date | Deadline | Frequency |
| PP&GH | 4.2.6.4.3 | Create a Structural Control Inspection and Maintenance Form | July 1, 2014 | December 31, 2014 | Once during permit term |
| PP&GH | 4.2.6.2 | Create an evaluation checklist for the GIS assessment | July 1, 2014 | December 31, 2014 | Once during permit term |
| PP&GH | 4.2.6.2 | Perform GIS Assessment | July 1, 2014 | December 31, 2014 | Once during permit term |
| PP&GH | 4.2.6.5 | Revise a Written Annual Employee Training Program | July 1, 2014 | December 31, 2014 | Once during permit term |
| PP&GH | 4.2.6.5 | Create a list of Employees Identified for PP&GH Training | July 1, 2014 | December 31, 2014 | Annually |
| Year 2 - 2015 | | | | | |
| Measure | Section | Brief Description | Start Date | Deadline | Frequency |
| PEO | 4.2.1.1.3 | Sponsor/Support Community Events | January 1, 2015 | December 31, 2015 | Annually |
| PEO | 4.2.1.1.7 | Distribute Campaign Materials | January 1, 2015 | December 31, 2015 | Annually |
| PIP | 4.2.2.1.1 | Sponsor/Support Citizen Participation Events | January 1, 2015 | December 31, 2015 | Annually |
| IDDE | 4.2.3.2.4/5/8 | Develop Illicit Tracking Procedures | July 1, 2014 | July 1, 2015 | Once during permit term |
| IDDE | 4.2.3.2.1 | Update Storm Sewer Map | January 1, 2015 | December 31, 2015 | Annually |
| IDDE | 4.2.3.2.3.a | Conduct Field Screening of Year 2 Screening Points | January 1, 2015 | December 31, 2015 | Annually |
| IDDE | 4.2.3.2.4/5 | Conduct Illicit Tracking of Year 2 Potential Illicit Discharges | January 1, 2015 | December 31, 2015 | As Needed |
| IDDE | 4.2.3.2.5/6 | Document Illicit Discharges | January 1, 2015 | December 31, 2015 | As Needed |
| IDDE | 4.2.3.2.2 | Identify Year 3 Priority Areas | January 1, 2015 | December 31, 2015 | Annually |
| IDDE | 4.2.3.2.2.a.i | Identify Year 3 Screening Points | January 1, 2015 | December 31, 2015 | Annually |
| IDDE | 4.2.3.9 | Implement IDDE Employee Training | January 1, 2015 | December 31, 2015 | Annually |
| CSR | 4.2.4.4.5.b/c | Revise SWP3 Submittal and Review Requirements | July 1, 2014 | June 30, 2015 | Once during permit term |
| CSR | 4.2.4.4.5.f | Develop SWP3 Review Procedures for Discharges to Impaired Waters | July 1, 2014 | December 31, 2015 | Once during permit term |
| CSR | 4.2.4.6.a | Maintain Site Inspection Inventory | January 1, 2015 | December 31, 2015 | Annually |
| CSR | 4.2.4.9 | Construction Operator Training | January 1, 2015 | December 31, 2015 | Annually |
| PCR | 4.2.5.2 | Develop/Modify Site Performance Standards | July 1, 2014 | December 31, 2015 | Once during permit term |
| PCR | 4.2.5.4/6 | Develop procedures and forms for post construction BMP maintenance inspections | January 1, 2015 | December 31, 2015 | Once during Permit term |
| PCR | 4.2.5.5 | Update Post Construction BMP Inventory | January 1, 2015 | December 31, 2015 | Annually |
| PCR | 4.2.5.6.2 | Conduct Post Construction BMP Installation Inspections | January 1, 2015 | December 31, 2015 | Annually |

| Measure | Section | Brief Description | Start Date | Deadline | Frequency |
|----------------------|---------------|---|-----------------|-------------------|-------------------------|
| PCR | 4.2.5.6.1 | Conduct Post Construction BMP Maintenance Inspections | January 1, 2015 | December 31, 2015 | Annually |
| PP&GH | 4.2.6.1.1 | Develop Fort Facility Inventory | July 1, 2014 | December 31, 2014 | Once during permit term |
| PP&GH | 4.2.6.2.1 | Develop a Fort Facility Evaluation Checklist | July 1, 2014 | June 30, 2015 | Once during permit term |
| PP&GH | 4.2.6.2.1 | Assessment of Non Permitted Fort Facilities | January 1, 2015 | June 30, 2015 | Once during permit term |
| PP&GH | 4.2.6.2.1 | Identify High Priority Facilities | January 1, 2015 | June 30, 2015 | Once during permit term |
| PP&GH | 4.2.6.3 | Create Inspection Report Template for High Priority Facilities | January 1, 2015 | June 30, 2015 | Once during permit term |
| PP&GH | 4.2.6.4.2 | Develop Pollution Prevention Measures for Fort Operation and Maintenance Activities | July 1, 2014 | June 1, 2015 | Once during permit term |
| PP&GH | 4.2.6.4.2 | Implement Pollution Prevention Measures for Operation and Maintenance Activities | June 1, 2015 | December 31, 2015 | Annually |
| PP&GH | 4.2.6.4.3 | Inspect Owned Structural Controls | January 1, 2015 | June 30, 2015 | Annually |
| PP&GH | 4.2.6.4.3 | Maintain Owned Structural Controls | May 1, 2015 | December 31, 2015 | Annually |
| PP&GH | 4.2.6.5 | Conduct PP&GH Training | January 1, 2015 | December 31, 2015 | Annually |
| Year 3 - 2016 | | | | | |
| Measure | Section | Brief Description | Start Date | Deadline | Frequency |
| PEO | 4.2.1.1.3 | Sponsor/Support Community Events | January 1, 2016 | December 31, 2016 | Annually |
| PEO | 4.2.1.1.7 | Distribute Campaign Materials | January 1, 2016 | December 31, 2016 | Annually |
| PEO | 4.2.1.1.8 | Assess the PEO Plan | January 1, 2016 | June 30, 2016 | Annually |
| PEO | 4.2.1.1.8 | Develop Annual Adjustments for the PEO Plan | July 1, 2016 | December 31, 2016 | Annually |
| PIP | 4.2.2.1.1 | Sponsor/Support Citizen Participation Events | January 1, 2016 | December 31, 2016 | Annually |
| IDDE | 4.2.3.2.1 | Update Storm Sewer Map | January 1, 2016 | December 31, 2016 | Annually |
| IDDE | 4.2.3.2.3.a | Conduct Field Screening of Year 3 Screening Points | January 1, 2016 | December 31, 2016 | Annually |
| IDDE | 4.2.3.2.4/5 | Conduct Illicit Tracking of Year 3 Potential Illicit Discharges | January 1, 2016 | December 31, 2016 | As Needed |
| IDDE | 4.2.3.2.5/6 | Document Illicit Discharges | January 1, 2016 | December 31, 2016 | As Needed |
| IDDE | 4.2.3.2.2 | Identify Year 4 Priority Areas | January 1, 2016 | December 31, 2016 | Annually |
| Measure | Section | Brief Description | Start Date | Deadline | Frequency |
| IDDE | 4.2.3.2.2.a.i | Identify Year 4 Screening Points | January 1, 2016 | December 31, 2016 | Annually |
| IDDE | 4.2.3.2.3b | Conduct Field Screening Assessment | January 1, 2016 | December 31, 2016 | Once during permit term |
| CSR | 4.2.4.6.a | Maintain Site Inspection Inventory | January 1, 2016 | December 31, 2016 | Annually |
| CSR | 4.2.4.9 | Construction Operator Training | January 1, 2016 | December 31, 2016 | Annually |

| PCR | 4.2.5.5 | Update Post Construction BMP Inventory | January 1, 2016 | December 31, 2016 | Annually |
|---------------|---------------|--|-----------------|-------------------|-------------------------|
| PCR | 4.2.5.6.2 | Conduct Post Construction BMP Installation Inspections | January 1, 2016 | December 31, 2016 | Annually |
| PCR | 4.2.5.6.1 | Conduct Post Construction BMP Maintenance Inspections | January 1, 2016 | December 31, 2016 | Annually |
| PP&GH | 4.2.6.3 | Conduct High Priority Facility Inspections. | January 1, 2016 | December 31, 2016 | Annually |
| PP&GH | 4.2.6.4.1 | Prioritize MS4 Stormwater System | January 1, 2015 | March 1, 2016 | Once during permit term |
| PP&GH | 4.2.6.4.1 | Develop and Implement Maintenance Schedule for Stormwater System | March 1, 2016 | May 1, 2016 | Once during permit term |
| PP&GH | 4.2.6.4.2 | Continue to Implement Pollution Prevention Measures for O&M Activities | January 1, 2016 | December 31, 2016 | Annually |
| PP&GH | 4.2.6.4.3 | Inspect Owned Structural Controls | January 1, 2016 | April 31, 2016 | Annually |
| PP&GH | 4.2.6.4.3 | Maintain Owned Structural Controls | May 1, 2016 | December 31, 2016 | Annually |
| PP&GH | 4.2.6.5 | Conduct PP&GH Training | January 1, 2016 | December 31, 2016 | Annually |
| Year 4 - 2017 | | | | | |
| Measure | Section | Brief Description | Start Date | Deadline | Frequency |
| PEO | 4.2.1.1.3 | Sponsor/Support Community Events | January 1, 2017 | December 31, 2017 | Annually |
| PEO | 4.2.1.1.7 | Distribute Campaign Materials | January 1, 2017 | December 31, 2017 | Annually |
| PEO | 4.2.1.1.8 | Assess the PEO Plan | January 1, 2017 | June 30, 2017 | Annually |
| PEO | 4.2.1.1.8 | Develop Annual Adjustments for the PEO Plan | July 1, 2017 | December 31, 2017 | Annually |
| PIP | 4.2.2.1.1 | Sponsor/Support Citizen Participation Events | January 1, 2017 | December 31, 2017 | Annually |
| IDDE | 4.2.3.2.1 | Update Storm Sewer Map | January 1, 2017 | December 31, 2017 | Annually |
| IDDE | 4.2.3.2.3.a | Conduct Field Screening of Year 4 Screening Points | January 1, 2017 | December 31, 2017 | Annually |
| IDDE | 4.2.3.2.4/5 | Conduct Illicit Tracking of Year 4 Potential Illicit Discharges | January 1, 2017 | December 31, 2017 | As Needed |
| IDDE | 4.2.3.2.5/6 | Document Illicit Discharges | January 1, 2017 | December 31, 2017 | As Needed |
| IDDE | 4.2.3.2.2 | Identify Year 5 Priority Areas | January 1, 2017 | December 31, 2017 | Annually |
| Measure | Section | Brief Description | Start Date | Deadline | Frequency |
| IDDE | 4.2.3.2.2.a.i | Identify Year 5 Screening Points | January 1, 2017 | December 31, 2017 | Annually |
| CSR | 4.2.4.6.a | Maintain Site Inspection Inventory | January 1, 2017 | December 31, 2017 | Annually |
| CSR | 4.2.4.9 | Construction Operator Training | January 1, 2017 | December 31, 2017 | Annually |
| PCR | 4.2.5.5 | Update Post Construction BMP Inventory | January 1, 2017 | December 31, 2017 | Annually |
| PCR | 4.2.5.4/6 | Update procedures and forms for post construction BMP installation inspections | January 1, 2017 | December 31, 2017 | Once During Permit Term |

| PCR | 4.2.5.6.2 | Conduct Post Construction BMP Installation Inspections | January 1, 2017 | December 31, 2017 | Annually |
|---------------|-------------|--|-----------------|-------------------|-------------------------|
| PCR | 4.2.5.6.1 | Conduct Post Construction BMP Maintenance Inspections | January 1, 2017 | December 31, 2017 | Annually |
| PP&GH | 4.2.6.3 | Conduct High Priority Facility Inspections. | January 1, 2017 | December 31, 2017 | Annually |
| PP&GH | 4.2.6.4.2 | Continue to Implement Pollution Prevention Measures for O&M Activities | January 1, 2017 | December 31, 2017 | Annually |
| PP&GH | 4.2.6.4.3 | Inspect Owned Structural Controls | January 1, 2017 | April 31, 2017 | Annually |
| PP&GH | 4.2.6.4.3 | Maintain Owned Structural Controls | May 1, 2017 | December 31, 2017 | Annually |
| PP&GH | 4.2.6.5 | Conduct PP&GH Training | January 1, 2017 | December 31, 2017 | Annually |
| Year 5 - 2018 | | | | | |
| Measure | Section | Brief Description | Start Date | Deadline | Frequency |
| PEO | 4.2.1.1.3 | Sponsor/Support Community Events | January 1, 2018 | December 31, 2018 | Annually |
| PEO | 4.2.1.1.7 | Distribute Campaign Materials | January 1, 2018 | December 31, 2018 | Annually |
| PEO | 4.2.1.1.8 | Assess the PEO Plan | January 1, 2018 | June 30, 2018 | Annually |
| PEO | 4.2.1.1.8 | Develop Annual Adjustments for the PEO Plan | July 1, 2018 | December 31, 2018 | Annually |
| PIP | 4.2.2.1.1 | Sponsor/Support Citizen Participation Events | January 1, 2018 | December 31, 2018 | Annually |
| IDDE | 4.2.3.2.1 | Update Storm Sewer Map | January 1, 2018 | December 31, 2018 | Annually |
| IDDE | 4.2.3.2.3.a | Conduct Field Screening of Year 5 Screening Points | January 1, 2018 | June 30, 2018 | Annually |
| IDDE | 4.2.3.2.4/5 | Conduct Illicit Tracking of Year 5 Potential Illicit Discharges | January 1, 2018 | December 31, 2018 | As Needed |
| IDDE | 4.2.3.2.5/6 | Document Illicit Discharges | January 1, 2018 | December 31, 2018 | As Needed |
| CSR | 4.2.4.6.a | Maintain Site Inspection Inventory | January 1, 2018 | December 31, 2018 | Annually |
| Measure | Section | Brief Description | Start Date | Deadline | Frequency |
| CSR | 4.2.4.9 | Construction Operator Training | January 1, 2018 | December 31, 2018 | Annually |
| PCR | 4.2.5.5 | Update Post Construction BMP Inventory | January 1, 2018 | December 31, 2018 | Annually |
| PCR | 4.2.5.6.2 | Conduct Post Construction BMP Installation Inspections | January 1, 2018 | December 31, 2018 | Annually |
| PCR | 4.2.5.6.1 | Conduct Post Construction BMP Maintenance Inspections | January 1, 2018 | December 31, 2018 | Annually |
| PP&GH | 4.2.6.2.1 | Document Results for Facility Evaluations | January 1, 2018 | October 31, 2018 | Once during permit term |
| PP&GH | 4.2.6.3 | Conduct High Priority Facility Inspections. | January 1, 2018 | December 31, 2018 | Annually |
| PP&GH | 4.2.6.4.2 | Continue to Implement Pollution Prevention Measures for O&M Activities | January 1, 2018 | December 31, 2018 | Annually |
| PP&GH | 4.2.6.4.3 | Inspect Owned Structural Controls | January 1, 2018 | April 31, 2018 | Annually |
| PP&GH | 4.2.6.4.3 | Maintain Owned Structural Controls | May 1, 2018 | December 31, 2018 | Annually |

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| PP&GH | 4.2.6.5 | Conduct PP&GH Training | January 1, 2018 | December 31, 2016 | Annually |
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Appendix C
Fort Jackson
Urbanized Area

Appendix D

TMDL Monitoring and Assessment Plans

Appendix E
Fort Jackson
Stormwater Management Regulation

Appendix F

Standard Operating Procedures for Use in Field Investigations for Illicit Discharges

Appendix G
Fort Jackson
Enforcement Response Plan