

**Fort Stewart
Stormwater Pollution Prevention Plan
Industrial General Permit**

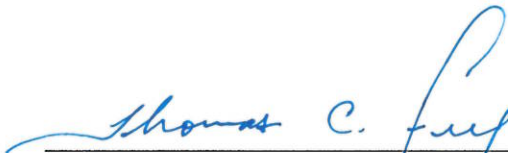
Fort Stewart Stormwater Pollution Prevention Plan

**Georgia General NPDES Stormwater Permit GAR 050000 for Discharges Associated with
Industrial Activity**

September 2022

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"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."



Signature of Duly Authorized Representative

Thomas C. Fry

Name of Duly Authorized Representative

Chief, Environmental Division

Title of Duly Authorized Representative

Amendment Log

[illegible]

September 2022

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1. Introduction

This Stormwater Pollution Prevention Plan (SWP3) serves as a compliance document for all the Fort Stewart (Installation) industrial activities regulated under the Georgia Environmental Protection Division (GA EPD) National Pollutant Discharge Elimination System (NPDES) Industrial General Permit for stormwater discharges associated with industrial activity, herein referred to as GA IGP.

1.1 Purpose

The purpose of this SWP3 is to:

- Identify potential pollution sources affecting the quality of stormwater discharges;
- Describe practices that will minimize and control pollutions in stormwater discharges associated with industrial activities; and
- Ensure implementation of these practices.

This SWP3 will serve as a guide for evaluating potential stormwater pollution sources and for selecting and implementing appropriate management methods to prevent or control pollution in any stormwater discharge associated with industrial activities.

This SWP3 may be updated following the procedures set forth in this SWP3 to comply with the GA IGP effective June 1, 2022. A copy of the GA IGP is provided in Appendix A. The SWP3 is required to be updated and revised whenever there is a change in design, construction, operation, or maintenance at the industrial activities that may impact the potential pollutants to be discharged to stormwater runoff. Also, if the SWP3 is found to be ineffective in controlling the discharge of pollutants, the SWP3 will be revised to correct the identified deficiencies.

1.2 Regulatory Background

As required by the 1987 amendments to the Clean Water Act (CWA), the United States Environmental Protection Agency (USEPA) developed a stormwater discharge permitting program under the NPDES to regulate the amount of pollutants discharged to Waters of the United States resulting from stormwater runoff. Final regulations promulgated on November 16, 1990, established application requirements for stormwater permits under an individual permit, group permit, or general permit application. As a result, Georgia issued the GA IGP to regulate stormwater discharges associated with industrial activities.

As part of the requirements set forth in the GA IGP, the Installation must identify all activities occurring at the Installation and document the possible pollutant that could be generated by those activities. This SWP3 addresses those activities, associated pollutants, and discusses the best management practices (BMPs) that are followed by Installation personnel. In addition, routine inspections and monitoring of stormwater discharges are required. This SWP3 was prepared to satisfy the SWP3 requirements for the Installation in compliance with the GA IGP.

1.3 NOI Submittal

Prior to authorization of stormwater discharges associated with industrial activities, GA EPD requires submittal of a Notice of Intent (NOI) for facilities. A renewal NOI for the GA IGP was submitted electronically via Georgia EPD Online System (GEOS) and a copy of the submitted

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NOI is included in Appendix B. All reporting under the GA IGP will be performed using electronic filing as required by GA EPD. The NOI was submitted on June 29, 2022.

1.4 SWP3 Modifications

This SWP3 will be modified whenever a triggering condition(s) for corrective action is needed as described later in this SWP3. The modifications will be such that the triggering condition does not recur or to reflect changes implemented when review following the triggering conditions indicates that changes to the control measures are necessary to meet effluent limits. Amendments to the SWP3 must be documented on the Amendment Log.

1.5 SWP3 Availability

This SWP3 must be always available at the Installation, and must be immediately available to Federal, State, or local regulators. A copy of the SWP3 will also be available electronically at the following website:

<https://home.army.mil/stewart/index.php/about/Garrison/DPW/environmental/prevention-and-compliance/water>.

1.6 Signage

As part of the GA IGP, a sign or other notice of the SWP3 must be posted in a publicly accessible location at or near the industrial activity, and in view from the public right-of-way. All industrial activities are located within the boundaries of the Installation, a secure facility and not accessible to the public. Therefore, no sign will be posted.

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2. Pollution Prevention Team

The Pollution Prevention team consists of personnel that are responsible for implementing the SWP3. Implementation of the SWP3 includes a continuous assessment of potential pollutants, BMPs, spill response, employee training, discharge monitoring, and an annual SWP3 evaluation. A copy of this SWP3 will be available at the Installation and available to all team members. A copy of the SWP3 will also be available on the Installation's website.

2.1 Designated Personnel and Pollution Prevention Team Responsibilities

Directorate of Public Works or the Duly Authorized Delegated Authority (DPW Environmental Division Chief, DPW Environmental Division Prevention & Compliance Division Chief, and Infrastructure Section Team Leader): Responsible for program management and oversight; final reviewer and approver for SWP3 development, implementation, and modifications; reviewing sampling and inspection reports; water quality data interpretation; coordination with other team members and other departments. This is the primary contact for GA EPD and has the delegated signature authority to sign inspection forms and discharge monitoring reports.

Stormwater Program Manager and Stormwater Compliance Assessors: Responsible for routine inspections, visual sampling, water quality sampling, program support, and coordination between other departments.

Activity Specific Environmental Compliance Officers/Environmental Compliance Non-Commissioned Officer (ECOs/ECNCOs): Serves as the point of contact for the industrial activities. Document and control petroleum, oil, and lubricants (POLs) stored and used. Maintain and use the SWP3 to guide daily activities. Perform inspections and report any issues concerning environmental issues.

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3. Site Description

The Installation's industrial activities lie within the Ogeechee watershed and has multiple perennial state waters originating and passing through its boundaries. The Installation has one major drainage stream to which its industrial activities ultimately discharge, Mill Creek. All industrial outfalls discharge to the Installation's Municipal Separate Storm Sewer System (MS4). The receiving water has not been classified as impaired. Therefore, no Total Maximum Daily Loads (TMDLs) have been designated.

The Installation has three industrial activities, with the primary industrial activity as Sector T, Treatment Works. The secondary industrial activities consist of Sector K, Hazardous Waste Treatment, Storage, or Disposal Facilities, and Sector N, Scrap Recycling Facilities. The sector specific industrial activities covered under this SWP3 are discussed below.

3.1 Sector T Facility

The Directorate of Public Works Industrial Wastewater Treatment Plant is located on the west side of the cantonment area. The design of the plant is 1.5 million gallons per day, and wastewater discharges are permitted under a separate NPDES permit. Industrial activities associated with the facility include the treatment process, the loading and unloading of material/chemicals for the treatment process, the storage of treatment products/chemicals, and the use of vehicles and equipment at the plant for routine operations.

3.2 Sector K Facility

The Directorate of Public Works Hazardous Waste Handling Facility is located on the southwest side of the cantonment area. The facility stores hazardous waste such as ignitable, reactive, and corrosives. Hazardous wastes generated on the Installation are sent to this facility and stored until shipped to a final disposal destination off-post. Wastes are typically stored at the facility no longer than 90 days. Industrial activities associated with this facility include loading and unloading of hazardous waste, and the use of vehicles and equipment for this process.

3.3 Sector N Facility

The Directorate of Public Works Recycling Facility is located on the southwest side of the cantonment area. The facility accepts scrap metal recyclable material. Materials are stored at the facility until they are either reused or transported off-site to be recycled. Industrial activities associated with this facility include loading and unloading of scrap metal recyclable materials, and the use of vehicles and equipment for this process.

3.4 General Map

General location maps of the Installation's industrial activities are available in the Activity Specific SWP3 in Appendix C.

3.5 Site Maps

Site location maps of the Installation's industrial activities are available in the Activity Specific SWP3 in Appendix C.

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4. Summary of Potential Pollutant Sources

The Industrial activities and associated pollutants area consistent throughout the Installation. The potential pollutant sources associated with industrial activities most commonly found are as follows:

- Parts and equipment storage
- Unused POL and material storage
- Scrap metal/wood storage
- Municipal waste and recyclable storage
- Hazardous and Non-hazardous waste storage

The specific listing of potential pollutants found at each facility are listed in the Activity Specific SWP3 in Appendix C.

4.1 Spills and Leaks

Spills and leaks can occur at all outdoor industrial areas. The areas with the greatest likelihood for spills and leaks are those that involve the transfer of liquids or the use of equipment/vehicles and may include storage areas or loading and unloading areas amongst others. The corresponding outfalls that have the potential to be affected by spill and leaks are included in the Activity Specific SWP3 in Appendix C.

The Installation considers a spill significant if it is 50 gallons or greater or reaches Waters of the State. The significant spills that have occurred are documented in Appendix D.

4.2 Unauthorized Non-Stormwater Discharges

Non-stormwater discharges are those that do not originate from storm events. Non-stormwater discharges not authorized by the GA IGP or covered under a separate NPDES permit must either be eliminated or covered under another NPDES permit. Potential sources of non-stormwater discharges can include illicit sewer or process water connections.

Non-stormwater discharge evaluations were initially conducted in August 2016 during the previous permit cycle. Evaluation criteria used for this process included physical inspection of each site, a desktop review of the stormwater infrastructure, and interviews with site personnel. Corrective actions were not required because of the initial evaluation.

More recent evaluations have been conducted through the annual illicit discharge survey required by the GA IGP. The illicit discharge survey involves a desktop review of the stormwater infrastructure, and a physical investigation of the primary receiving waters and outfalls. Corrective actions were not required.

Ongoing evaluations are performed during routine inspections. These evaluations include physical inspections of the site and interviews with site personnel. Records and findings are documents in the inspection reports.

4.3 Salt Storage

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The Installation currently does not conduct any deicing activities. Therefore, no salt or other deicing materials are stored on site.

4.4 Sampling Data

Sampling data can be found in Appendix E.

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5. Stormwater Control Measures

Stormwater control measures are implemented to minimize pollutant discharges in stormwater. The selection, design, installation, and implementation of these control measures are in accordance with good engineering practices and manufacturer's specifications. The control measures required by the GA IGP are discussed in this section.

5.1 Minimize Exposure

Material segregation or covering is used to minimize the potential for stormwater contamination resulting from many activities or materials located outdoors. These impacts are eliminated or reduced by either

- Covering the storage or activity area, where feasible;
- Repairing leaky equipment inside, if possible, or outside either when it is not raining or where measures are in place to prevent exposure that would lead to stormwater discharge;
- Segregating materials and/or activities away from drains or other runoff areas.

5.2 Good Housekeeping

Good housekeeping procedures are practical, cost-effective measures to maintain a clean and orderly operation to minimize the number of potential sources of pollutants in stormwater discharges. Protocols for good housekeeping reduce the mishandling of chemicals and equipment and include the following methods:

- Routine clean ups;
- Implementation of BMPs;
- Daily pickup and disposal of windblown debris;
- Vehicle and equipment inspection for fluid leaks and proper operation;
- Daily inspection of containers used for storage;
- Routine visual inspections of all potential pollution sources;
- Checking the site for signs of erosion and sedimentation;
- Using sound judgement to maintain a clean working environment; and
- Routine training and safety meetings.

5.3 Maintenance

Preventative includes regular and routine review, inspection, and maintenance of stormwater control structures as well as other BMPs is required by this SWP3 including:

- Maintain stormwater infrastructure. Repair any erosion and maintain vegetation as needed;
- Routinely remove sediment and debris from drainage features;
- Inspect and perform necessary maintenance on all erosion and drainage controls;
- Inspect and perform necessary maintenance on all other BMPs; and
- Maintain diversion berms and secondary containment around the materials/waste storage area to properly divert stormwater into the appropriate drainage inlet structure.

5.4 Best Management Practices

The following BMPs are used:

- Use dry cleanup methods to clean spills;

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- Inspect for fluid leaks from vehicles;
- Maintain berms as to control stormwater in material/waste storage areas;
- Routinely remove sediment and debris from drainage features;
- Maintain drainage structures to ensure proper function;
- Perform regular inspections for proper implementation of control structure; and
- Train personnel in the implementation of BMPs.

5.5 Spill Prevention and Response Procedures

Spill prevention and response procedures are included in the Installation's Spill Prevention, Control, and Countermeasures Plan (SPCCP). The SPCCP includes procedures for preventing spills such as control measures for material handling and storage, and the procedures for preventing spills that can contaminate stormwater. The SPCCP specifies cleanup equipment and procedures to be utilized during a spill.

5.6 Erosion and Sediment Control

Site personnel must minimize erosion by stabilizing exposed soils to minimize pollutant discharges. Structural and non-structural control measures will be used to minimize the discharge of sediment.

5.7 Employee Training

Training is required for all personnel who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of the permit.

In addition, all ECOs/ECNCO's are required to take a 40-hour ECO Course. The course is a comprehensive class intended to educate personnel on proper waste disposal, pollution prevention, sustainability goals, and environmental compliance. The ECO Course is held at least four times per year unless specific situations dictate a variation.

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6. Schedules and Procedures

This section contains the schedules and procedures used to implement the control measures listed in Section 5. This section also addresses the inspections and monitoring requirements. The inspections are to be performed by a member of the Pollution Prevention Team.

6.1 Good Housekeeping

Good housekeeping procedures are practical, cost-effective measures to maintain a clean and orderly operation to minimize the number of potential sources of pollutants in stormwater discharges. Protocols for good housekeeping reduce the mishandling of chemical and equipment.

Personnel conduct periodic routine inspections for leaks, spills, pavement, and the condition of equipment, materials, drums, and containers. As a minimum, inspection of good housekeeping practices as described in Section 5 are performed on a quarterly basis.

6.2 Maintenance

Preventative maintenance shall include regular and routine review, inspection, maintenance, and repair of stormwater control structures as well as other equipment that is exposed to stormwater. Preventative maintenance is performed to avoid situations that may result in leaks, spills, and other releases. Preventative maintenance is performed on the outfalls which consists of removing vegetation and ensuring the stormwater system is free of soil, trash, and are flooding during storm events.

6.3 Spill Prevention and Response Procedures

Activities related to the prevention of spills and response procedures are outlined in the SPCCP.

6.4 Erosion and Sediment Controls

Personnel inspect erosion and sediment control monthly.

6.5 Employee Training

The Installation has developed and implemented a training program focusing on stormwater issues as described in Section 5.

6.6 Routine Site Inspections

Routine Site Inspections are performed quarterly. These inspections will include investigation of industrial areas where industrial materials or activities are or potentially could be in contact with stormwater. At least once each calendar year the inspection must be performed when a stormwater discharge is occurring.

- Q1: January – March
- Q2: April – June
- Q3: July – September
- Q4: October – December

The routine inspections must be documented with the findings of each routing facility inspection performed. At a minimum, documentation must include:

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- Inspection date and time;
- Name(s) and signature(s) of the inspector(s);
- Weather information;
- All observations relating to the implementation of control measures; and
- Any control measures requiring maintenance, repairs, or replacement.

Records of these inspections will be maintained in Appendix F.

6.7 Quarterly Visual Assessment

Once each quarter, personnel will try to collect a stormwater sample from all sample points and conduct a visual assessment of each sample for:

- Color;
- Odor;
- Turbidity;
- Floating solids;
- Settled solids;
- Suspended solids;
- Foam;
- Oil sheen; and
- Other obvious indicators of stormwater pollution

6.8 Indicator Monitoring

The GA IGP included new indicator monitoring. Indicator monitoring is to provide both the Installation and GA EPD with a baseline of the stormwater discharge quality. The parameters are “report only” and do not have thresholds and will not trigger any follow-up corrective action. The parameters for indicator monitoring are:

- Chemical Oxygen Demand
- pH
- Total Suspended Solids

6.9 Benchmark Monitoring

Benchmark monitoring data are primarily used in determining the overall effectiveness of the control measures and to assist in determining when additional corrective action(s) may be necessary to comply with the permit. A benchmark exceedance is not a permit violation. However, if corrective action is required because of a benchmark exceedance, failure to conduct required corrective action is a permit violation.

The parameters and thresholds for Sector K are:

- Ammonia – 2.14 mg/L
- Magnesium – 0.064 mg/L
- Chemical Oxygen Demand – 120 mg/L
- Arsenic – 0.15 mg/L
- Cyanide – 0.022 mg/L

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- Mercury – 0.0014 mg/L
- Selenium – 0.005 mg/L
- Biological Oxygen Demand – 30 mg/L
- pH – 6-9
- Total Suspended Solids – 100 mg/L
- Cadmium – 0.0008 mg/L
- Lead – 0.023 mg/L
- Zinc – 0.05 mg/L

The parameters and thresholds for Sector N are:

- Chemical Oxygen Demand – 120 mg/L
- Oil and Grease – 15 mg/L
- Total Suspended Solids – 100 mg/L
- Copper – 0.0038 mg/L
- Lead – 0.014 mg/L
- Zinc – 0.04 mg/L

The parameter and threshold for Sector T is:

- Total Suspended Solids – 100 mg/L

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7. Corrective Actions

7.1 Conditions Requiring SWP3 Review and Revision

Corrective action must be initiated when any of the following applies:

- An unauthorized release or discharge occurs;
- Installation personnel become aware, or GA EPD determines, that control measures are not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in the permit;
- A required control measure was never installed, was installed incorrectly, or not in accordance with Part 2 and/or 8 of the GA IGP, or is not being properly operated or maintained; and
- Whenever a visual assessment shows evidence of stormwater pollution.

7.2 Conditions Requiring Review to Determine if Modifications are Necessary

If any of the following conditions occur, the Installation personnel must review the selection, design, installation, and implementation of control measures to determine if modifications are necessary to meet the requirements of the permit:

- Construction or a change in design, operation, or maintenance of the site significantly changes the nature of pollutants discharged in stormwater from the site, or significantly increases the quantity of pollutants discharged.

7.3 Immediate Corrective Action

If corrective action is needed, Installation personnel must immediately take all reasonable steps necessary to minimize or prevent the discharge of pollutant until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.

In this context, the term “immediately” requires the personnel, on the same day a condition requiring corrective action is found, to take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational. However, if a problem is identified at a time in the workday when it is too late to initiate corrective action, the initiation of corrective action must begin no later than the following workday.

7.4 Subsequent Corrective Action

If it is determined that additional corrective actions are necessary beyond those implemented pursuant to the above, the Installation personnel must complete the corrective action before the next storm event if possible, and within 14 calendar days from the time of discovery of the corrective action condition. If it is not feasible to complete the corrective action within the 14 calendar days, documentation must be prepared as to why it was infeasible to complete the corrective action within the timeframe. A schedule must also be identified for completing the work, which must be done as soon as practicable after the 14-day timeframe but no longer than 45 days after the discovery.

7.5 Effect of Corrective Action

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If the event triggering the review is a permit violation, correcting it does not remove the original violation. Additionally, failing to take corrective action in accordance with this section is an additional permit violation.

7.6 Corrective Action Documentation

Within 24 hours of discovery of any condition listed in Section 5.1.2 of the GA IGP, the following information must be documented:

- Description of the condition triggering the need for corrective action review. For any spills or leaks, the following information must be included: a description of the incident including material, date/time, amount, location, and reason for spill, and any leaks, spills or other releases that resulted in discharge of pollutants to Waters of the United States, through stormwater or otherwise;
- Date the condition was identified; and
- Description of immediate actions taken to minimize or prevent the discharge of pollutants. For any spills or leaks, include response actions, the date/time clean-up was completed, notifications made, and staff involved. Also include any measures taken to prevent the reoccurrence of such releases; and

Site personnel must also document the correcting actions taken or to be taken because of the conditions listed in Part 5.1 of the GA IGP within 14 days from the time of discovery of any of those conditions. Dates must be provided for when each documentation will be provided as to why it is infeasible to complete the necessary installations or repairs within the corrective action response timeframe, as well as the Installation personnel's schedule for installing the controls and making them operational as soon as practicable after the timeframe.

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8. Recordkeeping and Reporting

8.1 Submitting Information to GA EPD

The NOI, Annual Reports, and other reporting information required to be submitted by this permit shall be submitted via GEOS at

<https://geos.epd.georgia.gov/GA/GEOS/Public/GovEnt/Shared/Pages/Main/Login.aspx>.

Discharge Monitoring Reports (DMRs) shall be submitted electronically via GA EPD NetDMR, available at <https://npdes-ereporting.epa.gov/net-netdmr>.

8.2 Annual Reports

An annual report must be submitted to GA EPD electronically by January 30th for each year of permit coverage containing information generated from the past calendar year. This annual report includes:

- A summary of the past year's routine inspection documentation;
- A summary of the past year's quarterly visual assessment documentation;
- A summary of the past year's corrective action documentation; and
- The annual report must be signed and certified in accordance with the permit.

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**Appendix A
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Appendix B

Notice of Intent

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Appendix C

Activity Specific Stormwater Pollution Prevention Plan

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Appendix D

Spill Reports

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**Appendix E
Sampling Data**

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Appendix F

Inspections

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Appendix G

Blank Forms