

**Trainer Recertification
&
Local Issuing Authority Training
July 16, 2018**



Georgia Soil & Water Conservation Commission
Education & Certification



AGENDA

Trainer Recertification

July 16, 2018

8:00 – 9:00	Trainer Responsibilities
9:00 – 10:00	NPDES Construction Stormwater General Permits with 2018 Reissuance Updates
10:00 – 10:15	Break
10:15 – 11:15	Getting Started in GEOS
11:15 – 12:00	2016 Manual for Erosion and Sediment Control and BMP Updates
12:00 – 1:00	Lunch
1:00 – 2:00	Checklist Procedures
2:00 – 2:15	Break
2:15 – 3:15	LIA Semi-annual Reporting
3:15 – 4:30	Conducting an Overview
4:30	Wrap-up/Questions

Insert Tab

Trainer Responsibilities

Back of Tab



Trainer Responsibilities

Trainer/Instructor Recertification Seminar
July 2018

Overview of Policies & Procedures

- Scheduling and Holding Certification and Recertification Courses
- After the Course
- Citizenship Paperwork
- Third Party or Trainer Developed Courses
- FAQ
- Trainer Audits

Scheduling a Course

The following applies to Initial Courses as well as Recertification Courses:

- The approved trainer must notify the GSWCC of the scheduled course at least 15 days prior to the date of the course
- Trainers are required to use the electronic form entitled "**Notification of Scheduled Education & Certification Courses for Approved Trainers**"
- The following information must be provided
 - Course Name
 - Course Date
 - Maximum # of Attendees
 - Course Location
 - Contact Information

The completed form (Excel Spreadsheet) should be filled out and submitted electronically to gaswcc.certification@gaswcc.ga.gov

Scheduling a Course

- Courses will be posted on the GSWCC website
- It is the responsibility of the trainer to check the website within 3 days of submittal of the course notification form to verify that the course has been posted
- If the course is not posted on the website, it is not in the system and exams will not be sent





During the Course

- Use approved PowerPoint presentations
- Provide course notebooks and #2 pencils
- Follow the course agenda provided in notebook
- Use “Exam Procedures” PowerPoint to ensure that all participants correctly understand how to complete the Application and Scantron forms

During the Exam

- Trainers are prohibited from:
 - Providing answers to or discussing exam questions
 - Reading the exam questions aloud
 - Altering score sheets
 - Allowing group testing

Initial Course Reminders

LOOK over exam materials turned in by course participants!

- Is DOB correct? (did they use 2018 as the year of birth?)
- Did participant bubble in an Exam Version?
- Is name listed correctly under “first” and “last” on the Scantron form
- Is the information on the application form legible? Did participant fill in full address (many people leave out City & Zip)

Recertification Course Reminders

- Double check the Scantron Roster form before submitting to GSWCC
 - Trainer ID
 - Course # (found on GSWCC website)
 - Date
 - Student ID number must be written and bubbled in on the form.

*Regardless of whether the trainer or the students fill out the form – **DOUBLE CHECK** to make sure all ID numbers are correct!!

DON'T FORGET CHANGE OF ADDRESS FORMS!!

Recertification FAQ

Q: Can I combine a GSWCC Level 1A & GSWCC Level 1B recertification course, so that each level can attend the course?

A: No, individuals with a Level 1A certification need to take a Level 1A recertification course AND individuals with a Level 1B certification need to take a Level 1B recertification course

Q: May an individual sit through 4 hours of a certification course to receive recertification credit?

A: No, individuals seeking recertification credit must take a recertification course. GSWCC will not award recertification credit if an individual attends a full certification course.

Q: What recertification course does an individual with a Subcontractor certification need to take?

A: There is not a recertification course for a Subcontractor certification. Individuals with a Subcontractor certification must retake the Subcontractor Awareness seminar every 3 years.

Returning Exam Packages

- Exam Packages & Class Registration List must be sent with a tracking method such as UPS/FedEx/Certified Mail USPS
- The trainer may drop off the exam package at the GSWCC office in Athens, GA
- All Exam Packages must be postmarked or delivered within 48 hours of exam

Canceled Certification Course

- If a certification course is canceled, and the trainer has already received the exam packet, those exams must be sent back to GSWCC within 48 hours of the course being canceled
- Exams may not be held and used for another course
- If a trainer submits completed exams from a canceled course, the exams will not be scored

Canceled Recertification Course

- If a recertification course is canceled, the canceled course code cannot be used for another recertification course
- GSWCC will not accept recertification rosters from an unscheduled course

Citizenship Documentation

O.C.G.A. 50-36-1: Must verify the legal immigration status of any person 18 years or older who applies for state or local public benefits as defined in federal law under 8 U.S.C. Section 1621

As of July 2, 2013, U.S. citizens and legal residents only **HAVE TO SUBMIT DOCUMENTATION ONCE**. All Qualified Aliens will have to submit the documentation for each course they attend

Most participants in recertification courses have submitted documentation. However, trainers should double check the paperwork status on the GSWCC website

Required Documentation

(2) Affidavit

- Legal U.S. Citizen
- Legal Permanent Resident
- Qualified Alien or Non-Immigrant under the federal Immigration & Nationality Act

The affidavit must be notarized by a Notary Public



Required Documentation

- A **legible photocopy** of at least one secure and verifiable document must accompany the affidavit that is being submitted by an applicant. A “secure and verifiable document” is defined in O.C.G.A. § 50-36-2

Secure & Verifiable Documents

- Secure & Verifiable Documents include, but are not limited to:
 - State/Government issued Drivers License, ID Card
 - Military ID
 - Passport issued by US or foreign government
 - Certificate of Citizenship or Naturalization
- The Office of the Attorney General of the State of Georgia created a catch-all in the list of Secure & Verifiable documents requiring acceptance of documents for proof of or documentation of identity if so required by federal law
- Such documents are deemed “Secure & Verifiable Documents” by the Attorney General of the State of Georgia

Third Party or Trainer Developed Courses

- GSWCC will allow a GSWCC-approved Trainer to develop a training course that may be used to satisfy continuing education requirements
- All 3rd party courses must be taught by a GSWCC-approved Trainer.
- Only the approved trainers listed on the application will be allowed to teach the course
- Applications for a 3rd party course must be completed and submitted at least 45 days prior to the commencement of the course
- All applications are processed in the order in which they are received

Third Party or Trainer Developed Courses

- Those trainers that are interested in developing a recertification course must submit an *Application for Continuing Education Course Approval*

- Available at www.gaswcc.georgia.gov

Third Party or Trainer Developed Courses

- Applications will be evaluated on the basis of subject matter presented and time devoted to the topic(s)
- Discussions relating to all aspect of erosion and sediment control and land disturbing activities may be considered for approval of credit hours
- **Examples**
 - Monitoring/Sampling
 - NPDES General Permits
 - BMP Installation
 - Structural & Vegetative BMPs
 - ES&PC Plans
 - Site Inspections

Third Party or Trainer Developed Courses

- The GSWCC Education & Certification Program will
 - Review the course outline and the instructor's qualifications and assign the appropriate credit hours
 - Education credit hour(s) will be assigned on a basis of 1.0 credit per hour of actual course instruction time with a maximum of 4.0 credit hours
 - Assign a course name/code that will be specific to that course

- Examples of topics that will not be considered for credit include:
 - Business Management
 - Marketing Techniques
 - Public Relations
 - Sales Presentations

Trainer Course Audits

- Periodically GSWCC will arrive unannounced to audit a course:
 - A GSWCC representative will introduce themselves and observe the trainer and the course
 - If any violations are found, a formal report will be written. A copy will be sent to the trainer and placed in his/her trainer file.

Third Party Instructor Audit

Date _____ Course _____

Course Location: _____

Instructor: _____ Professor _____

Number of Participants: _____ Evaluator: _____

1. Did the course start on time? _____
2. Did the attendees receive the appropriate course notebook? _____
3. Was the course notebook completed? (i.e. in notes, exams, presentations, appropriate materials) _____
4. Did the instructor have the required AV equipment? (i.e. laptop, LCD projector, microphone, etc.) _____
5. Was the room set up classroom style? (i.e. rows and aisles) _____
6. Did the instructor use the presentations provided by the Commission? _____
7. Were all agenda topics presented using the approved PowerPoint presentations? _____
8. Did the instructor adhere to the allotted time for each agenda topic? _____

Trainer Course Audits

- If the GSWCC attempts to audit a course, and the course is not being held at the specified location and the trainer did not notify the GSWCC **before the course**, the course will be canceled and the exams will not be accepted
- This applies to both open and closed courses

Replacement Cards

- Individuals must submit a written request for a replacement card along with a self addressed stamped envelope to:

GSWCC
4310 Lexington Rd
Athens, GA 30605

- No charge for replacements

Questions??

GSWCC
Urban Program
4310 Lexington Rd.
Athens, GA 30605
(706) 552-4474

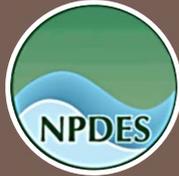
Insert Tab

NPDES

Back of Tab

1

NPDES
GENERAL PERMITS FOR
STORM WATER DISCHARGES
FROM CONSTRUCTION
ACTIVITY



 July 16, 2018

2 Overview

- Coverage – Slide 5
- Notice of Intent – Slide 20
- Special Conditions – Slide 31
- ES&PC Plan – Slide 40
- Notice of Termination – Slide 83

3 What is NPDES?

National Pollutant Discharge Elimination System



Created by the Federal Clean Water Act to control water pollution by regulating the discharge of pollutants to surface waters



The GA EPD has been "authorized" by the U.S. EPA to issue NPDES General Permits within the State

3 NPDES General Permits

4

- GAR100001 – Stand Alone
- GAR100002 – Infrastructure
- GAR100003 – Common Development

- The Permits became effective on September 24, 2013
 - ▣ Revised July 1, 2016
 - ▣ Valid for 5 years (Expires July 31, 2018)
- Permits are available at:
 - ▣ www.epd.georgia.gov
 - ▣ www.gaswcc.georgia.gov

5

Part I. Coverage Under The Permit

- Permit Area
- Eligibility
- Definitions

Coverage Under the Permit

6

- Permit Area
 - ▣ These permits regulate point source discharges of storm water to the waters of the State of Georgia from construction activities
- Eligibility
 - (1) Construction activities that will result in land disturbance equal to or greater than one (1) acre
 - (2) Construction activities involving less than one (1) acre which are a part of a larger common development (i.e. greater than one (1) acre)

Part I.A.

Part I.C.

“Construction Activity”

7

- The disturbance of soils associated with clearing, grading, excavating, filling of land, or other similar activities
- Does not include agricultural and silvicultural practices, but does include agricultural buildings

Part I.B. defn.

“Stand Alone Construction” (GAR100001)

8

- Construction activities that are not part of a common development where the primary permittee chooses not to use secondary permittees



Part I.B. defn.

“Infrastructure Construction” (GAR100002)

9

- Construction activities that are not part of a common development that include the construction, installation, and maintenance of roadway and railway projects and conduits, pipes, pipelines, substations, cables, wires, trenches, vaults, manholes, and similar or related structures for the conveyance of natural gas, liquid petroleum products, electricity, telecommunications, water, storm water, or sewage

Part I.B. defn.

“Infrastructure Construction”

10



Infrastructure Eligibility

11

- Infrastructure construction projects that will result in contiguous land disturbance equal to or greater than one (1) acre
- Contiguous areas of land disturbances includes those areas of land disturbances solely separated by:
 - Drilling & Boring activities
 - Waters of the State and adjacent State buffers
 - Roadways and/or Railways and/or Intersections

Part I.C.1(a)

Infrastructure Eligibility

12

- Coverage under this permit is not required for infrastructure construction projects that consist solely of routine maintenance for the original purpose of the facility that is performed to maintain the original line and grade and the hydraulic capacity
- Must comply with the following conditions:
 1. No mass grading
 2. Stabilized by the end of each day
 3. Duration of < 120 calendar days
 4. Final Stabilization at the end of the project

Part I.C.1(c)

Infrastructure Eligibility

13

- Coverage under this permit is not required for infrastructure road construction projects that consist solely of routine maintenance for the original purpose of the facility that is performed to maintain the original line and grade and vehicular capacity
- Must comply with the following conditions:
 1. No mass grading
 2. Stabilized by the end of each day
 3. Duration of < 120 calendar days
 4. Final Stabilization at the end of the project

Part I.C.1(d)

“Common Development” (GAR100003)

14

- A contiguous area where multiple, separate, and distinct construction activities will be taking place at different times on different schedules under one plan of development on or after August 1, 2000



Part I.B. defn.

Permittees

15

- “Primary Permittee”
 - The Owner or Operator or both of a tract of land for a construction project subject to the permit
- “Secondary Permittee”
 - An owner, individual builder, utility company, or utility contractor that conducts a construction activity within a common development with an existing primary permittee
- “Tertiary Permittee”
 - The Owner or Operator of remaining lot(s) within a common development conducting a construction activity where the primary permittee and all secondary permittees have submitted a Notice of Termination or where a primary permittee no longer exists

Part I.B. defn.

“Best Management Practices” (BMPs)

16

- Schedules of activities
 - Prohibitions of practices
 - Maintenance procedures
 - Treatment requirements
 - Operating procedures
 - Practices to control spillage or leaks, sludge or waste disposal, or drainage from raw material storage
 - **Sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation**
- These practices are consistent with, and no less stringent than, those practices contained in the “Manual for Erosion & Sediment Control in Georgia” (Manual) published by the Georgia Soil & Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted to prevent or reduce the pollution of waters of Georgia

Part I.B. defn.

“Design Professional”

17

- A professional licensed in the State of Georgia in the field of:
 - Engineering
 - Architecture
 - Landscape Architecture
 - Forestry
 - Geology
 - Land Surveying
- A person that is a Certified Professional in Erosion & Sediment Control (**CPESC**) with a current certification by EnviroCert International, Inc.



Part I.B. defn.

“Certified Personnel”

18

- A person who has successfully completed the appropriate certification course approved by GSWCC
 - Level 1A – Contractors, Builders, Superintendents, Consultants
 - Level 1B – Regulatory Inspectors
 - Level II – Design Professionals or Plan Reviewers

A “Certified Person” shall be on-site at all times when land-disturbing activities are being conducted

Part I.B. defn.

“Normal Business Hours”

19

- Monday thru Friday, 8:00 a.m. to 5:00 p.m.
- Excluding:
 - Non-working Saturday
 - Non-working Sunday
 - Non-working Federal Holiday

Part I.B. defn.

20

Part II. Notice of Intent Requirements

- Deadlines
- Submittal
- Fees

Deadlines – Initial NOI

21

- For new construction sites, the permittee shall submit a Notice of Intent (NOI) at least 14 days prior to the commencement of construction activities
- The “Initial Notification” should be checked
- Applicable to primary, secondary, and tertiary permittees

Part II.A.1.

Revised June 2015

NOTICE OF INTENT

VERSION June 2015

State of Georgia
Department of Natural Resources
Biological Resources Division

For Coverage Under the 2013 Re-issuance of the NPDES General Permits
To Discharge Storm Water Associated With Construction Activity

THIS FORM IS DUE JULY 15, 2015

PRIMARY PERMITTEE
Required for this form are included on Page 4.

NOTICE OF INTENT (Check Only One)

Initial Notification - (New Facility/Construction Site)

Change of Information - (Existing Facility/Construction Site)

COVERAGE DESIRED (Check Only One)

GSW 10000 Standard Allowance

GSW 10000 Stormwater

GSW 10000 Common Development

5. SITE NAME/CONSTRUCTION INFORMATION

Project/Construction Site Name: _____

For GSW10000 Standard Allowance or GSW 10000 Common Development Project, enter GPS Location of Construction Start and Stop
To Construct or Expand Project, enter start and stop times to begin and end of the project. (Include start and stop times in local time.)

Latitude: _____ Longitude: _____

Start Date: _____ End Date: _____

For GSW10000 Stormwater Project, enter GPS Location of the Beginning and End of the Mitigation Project in the Bay

Latitude: _____ Longitude: _____

Construction Site Location (i.e., street address): _____

Page 1

Tertiary Permittee Submittal Options

25

- Option (1)
 - ▣ The permittee may submit a NOI for each individual lot and a new ES&PC Plan for each individual lot. For each NOI submitted, the Tertiary Permittee must submit a Notice of Termination
- Option (2)
 - ▣ If the permittee's total land disturbance with the construction site is less than 5 acres and the total land disturbance within the individual lot(s) is less than 1 acre, the permittee may submit a single NOI and ES&PC Plan for a typical individual lot(s). A Notice of Termination is required for each individual lot

Tertiary Permittee Submittal Options

26

- Option (3)
 - ▣ The permittee may submit a single NOI – Initial Notification for the entire construction site and a new ES&PC plan for the entire construction site
 - ▣ The permittee may submit the NOI – Initial Notification as either a Primary or Tertiary
 - ▣ A single Notice of Termination is required at the end
- The Primary Permittee must notify the legal title holders of each remaining lot(s) that these lot Owners will become Tertiary Permittee(s) – applicable to all lots, including lots that are less than one acre

Utility Companies Submittal Options

27

- A Utility Company may submit an annual Blanket Notice of Intent covering all construction activities within common developments statewide on or before January 15th of the year in which coverage is desired
- A copy of the Blanket NOI shall be provided to the primary permittee not more than seven (7) days prior to the commencement of construction activities by the Utility Company at each site

Part II.B.2(i)

NPDES General Permit Fees

28

- The **Primary Permittee** is solely responsible for the payment of fees for all planned land disturbing activities, including all land disturbing activities within a Common Development that will be conducted by the Secondary Permittees and/or Tertiary Permittees.

Part II.D.

NPDES General Permit Fees

29

III. CONSTRUCTION SITE ACTIVITY INFORMATION AND FEE CALCULATIONS

Start Date: _____ Completion Date: _____

Is this construction activity regulated by a certified Local Issuing Authority? Yes No

If Yes, Name of Local Issuing Authority: _____

NOTE: Instructions for fee calculations have been provided on Pages 6 - 7

	Acres	X	Fee	TOTAL FEE
<input type="checkbox"/> Acres Disturbed (to the nearest 1/10th acre) regulated by a certified Local Issuing Authority	_____	X	\$40	Fee: _____
<input type="checkbox"/> Acres Disturbed (to the nearest 1/10th acre) in an area with no certified Local Issuing Authority	_____	X	\$80	Fee: _____
<input type="checkbox"/> Acres Disturbed (to the nearest 1/10th acre) by an entity or activity exempt from a certified Local Issuing Authority's regulation pursuant to statute	_____	X	\$80	Fee: _____

PLEASE MAKE CHECKS PAYABLE TO: **Department of Natural Resources - EPD**

Do not mail cash.

NAME ON CHECK/MONEY ORDER: _____

Do not include fees payable to the Local Issuing Authority.

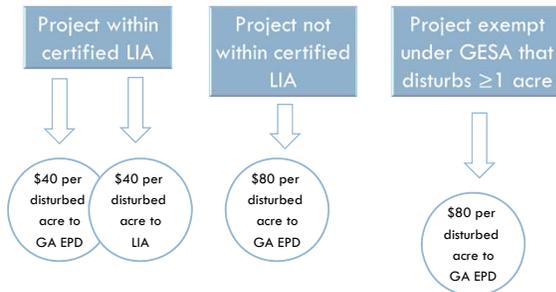
CHECK/MONEY ORDER NUMBER: _____

CHECK/MONEY ORDER AMOUNT: _____

Page 2

NPDES General Permit Fees

30



31 **Part III. Special Conditions**

Biota Impaired Stream Segment
TMDL Implementation Plan

Criteria

32 Discharges into, or within One Mile Upstream of and within the Same Watershed as, Any Portion of a Biota Impaired Stream Segment

- Impaired Stream Segment(s) with criteria:
 - Bio F (Impaired Fish Community) and/or
 - Bio M (Impaired Macroinvertebrate Community) within
 - Category 4a, 4b, or 5 and the potential cause is
 - Either "NP" (nonpoint source) or "UR" (urban runoff)



Part III.C.

Impaired Streams

33

- The ES&PC Plan must include at least four (4) BMPs for those areas of the site which discharge to the Impaired Stream Segment
- Part III.C.2. (a) – (v)



Additional Plan Requirements (a-u)

34

- a. During all construction activities as defined in this permit, double the width of the 25 foot undisturbed vegetated buffer along all State waters requiring a buffer and the 50 foot undisturbed vegetated buffer along all State waters classified as "trout streams" requiring a buffer. During construction activities, EPD will not grant variances to any such buffers that are increased in width pursuant to this section.
- b. Increase all temporary sediment basins and retrofitted storm water management basins to provide sediment storage of at least 3600 cubic feet (134 cubic yards) per acre drained.
- c. Use baffles in all temporary sediment basins and retrofitted storm water management basins to at least double the conventional flow path length to the outlet structure.
- d. A large sign (minimum 4 feet x 8 feet) must be on the site on the actual start date of construction visible from a public roadway identifying the construction site, the permittee(s), and the contact person(s) and telephone number(s) until a NOT has been submitted.
- e. Use anionic polyacrylamide (PAM) and/or mulch to stabilize all areas left disturbed for more than seven (7) calendar days in accordance with Part III.D.1. of this permit.
- f. Conduct turbidity sampling after every rain event of 0.5 inch or greater within any 24 hour period, recognizing the exceptions specified in Part IV.D.6.d. of this permit.

Part III.C.2.

Additional Plan Requirements (a-u)

35

- g. Comply with the applicable end-of-pipe turbidity effluent limit, without the "BMP defense" as provided for in O.C.G.A. 12-7-6(a)(1).
- h. Reduce the total planned site disturbance to less than 50% impervious surfaces (excluding any State-mandated buffer areas from such calculations). All calculations must be included on the Plan.
- i. Limit the amount of disturbed area at any one time to no greater than 25 acres or 50% of the total planned site, whichever is less. All calculations must be included on the Plan.
- j. Use "Dirt II" techniques available on the EPD website, www.gaepd.org (e.g., seep berms, sand filters, anionic PAM) to model and manage construction storm water runoff (including sheet flow). All calculations must be included on the Plan.
- k. Add appropriate organic soil amendments (e.g., compost) and conduct pre- and post-construction soil sampling to a depth of 6 (six) inches to document improved levels of soil carbon after final stabilization of the construction site.
- l. Use mulch filter berms, in addition to a silt fence, on the site perimeter wherever construction storm water (including sheet flow) may be discharged. Mulch filter berms cannot be placed in waterways or areas of concentrated flow.
- m. Apply the appropriate Georgia Department of Transportation approved erosion control matting or blankets or bonded fiber matrix to all slopes steeper than 3:1. All graphical illustrations must be included on the Plan.

Part III.C.2.

Additional Plan Requirements (a-u)

36

- n. Use appropriate erosion control matting or blankets instead of concrete in all construction storm water ditches and storm drainages designed for a 25 year, 24 hour rainfall event.
- o. Use anionic PAM under a passive dosing method (e.g., flocculant blocks) within all construction storm water ditches and storm drainages that feed into temporary sediment basins and retrofitted management basins.
- p. Install sod for a minimum 20 foot width (in lieu of seeding) after final grade has been achieved, along the site perimeter wherever construction storm water (including sheet flow) may be discharged.
- q. Conduct soil tests to identify and to implement site-specific fertilizer needs.
- r. Certified personnel shall conduct inspections at least twice every seven (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Part IV.D.4.a.(3)(a) - (c), Part IV.D.4.b.(3)(a) - (c) or Part IV.D.4.c.(3)(a) - (c) of this permit, as applicable.
- s. Apply the appropriate compost blankets (minimum depth 1.5 inches) to protect soil surfaces until vegetation is established during the final stabilization phase of the construction activity.
- t. Use alternative BMPs whose performance has been documented to be superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the State Soil and Water Conservation Commission).
- u. Limit the total planned site disturbance to less than 15% impervious surfaces (excluding any State mandated buffer areas from such calculations). All calculations must be included in the Plan.

Part III.C.2.

Exclusions

37

- These impaired stream requirements are not applicable to the following:
 - ▣ Tertiary permittees with a Plan(s) for a typical individual lot(s), if the total land disturbance within the construction site is less than five (5) acres and the total land disturbance within each lot is less than one (1) acre
 - ▣ Those discharges located within one (1) linear mile, but are not located within the watershed of any portion of that impaired stream segment

Part III.C.

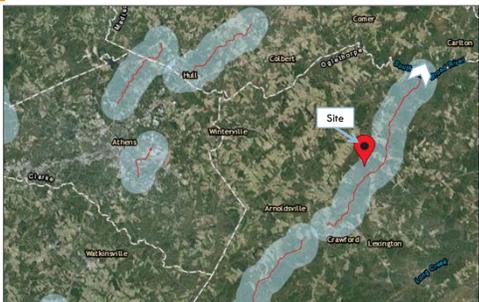
Resource Information

38

- Georgia's 305(b)/303(d) List Documents (Approved) can be viewed at:
<http://epd.georgia.gov/georgia-305b303d-list-documents>
- Georgia's 305(b)/303(d) Impaired Streams can be viewed at:
<http://www.gaswcc.org/maps2/>
- GIS Data Sets are available on the GA EPD website in ESRI ArcGIS 10.0 Shapefile and KMZ file format at:
<http://epd.georgia.gov/geographic-information-systems-gis-databases-and-documentation>

305(b)/303(d) Impaired Waters Map

39



40 Part IV. ES&PC Plan

- Stream Buffer Exemptions
- Compliance
- Contents of the ES&PC Plan
- Inspections
- Sampling

41 Stream Buffer Exemptions

- Stream crossings for water & sewer lines provided
 - It is within 25° of perpendicular to the stream
 - And the disturbance is not more than 50 ft. within the buffer
- Ephemeral Streams – excluding Trout streams
- Drainage Structures – warm water streams only
- Roadway Drainage Structures
- Construction of bulkheads or seawalls on:
 - Lake Sinclair & Lake Oconee

Part IV.(f)

42 Stream Buffer Exemptions



Sewer line crossing

Within 25° of perpendicular

Stream Buffer Exemptions

43



Stream Buffer Exemptions

44

- Public Drinking Water System Reservoirs



Part IV.(j)(1)

Stream Buffer Exemptions

45

- Stream crossings for Utility Lines for any EMC, municipal electrical system (MES) or public utility under the regulatory jurisdiction of the PSC and/or FERC or any Cable Television System
- Right-of-Way Posts, Guy Wires, Anchors, Survey Markers and the replacement or maintenance of existing utility structures (1) undertaken by any EMC/MES or public utility under the regulatory jurisdiction of the PSC and/or FERC or (2) undertaken by DOT, GA Highway Authority, State Road & Tollway Authority or any municipality or county.

Part IV.(j)

Stream Buffer Exemptions

46

- Maintenance, repair and/or upgrade of SWCD Watershed Dams when under the technical supervision of USDA-NRCS



Part IV.(j)(8)

Coastal Marshlands Exemptions

47

- Public drinking water system reservoirs
- Utility line crossings
 - Not more than 50 ft. width of disturbance within the buffer
- Aerial utility line crossings
 - Does not exceed 100 linear ft.
 - Constructed to minimize the number of crossings
 - Disturbance to underlying vegetation is minimized
 - Vegetation is re-established in bare areas
- Fences

Part IV.(iii)

Coastal Marshlands Exemptions

48

- Right-of-Way Posts, Guy Wires, Anchors, Survey Markers and the replacement or maintenance of existing utility structures (1) undertaken by any EMC/MES or public utility under the regulatory jurisdiction of the PSC and/or FERC or (2) undertaken by DOT, GA Highway Authority, State Road & Tollway Authority or any municipality or county.

Part IV.(iii)

ES&PC Plan

49

- A site-specific Erosion, Sedimentation and Pollution Control Plan shall be designed, installed, and maintained for the entire construction activity
- The ES&PC Plan must be prepared by a certified “design professional” as defined by the permit



Signature

50

- The ES&PC Plan shall be signed in accordance with Part IV. and be retained on site (or a readily accessible location)
- The primary permittee of a common development shall ensure
 - ▣ That each secondary permittee is provided with a copy of the Plan
 - ▣ That each secondary permittee signs the Plan
 - ▣ That each secondary permittee understand their role in implementing the Plan

Part IV.B.1.

Keeping Plans Current

51

- The primary permittee(s) shall amend their Plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on BMPs with a hydraulic component
- Amendments must be certified by the “design professional”
- **Hydraulic Component**
 - ▣ BMPs where the design is based upon rainfall intensity, duration and return frequency of storms

Part IV.C.

50+ Acre Sites

52

- For sites that are equal to or greater than 50 acres disturbed, regardless of the existence of a LIA, the following is required:
 - ▣ A single copy of the Plan shall be submitted to the appropriate GA EPD District Office
 - ▣ A written authorization from the appropriate EPD District Office

Part IV.A.4.b.

50+ Acre Sites

53

- Stand Alone
 - ▣ The Plan shall limit the amount of disturbed area to no greater than 50 acres at any one time
- Infrastructure
 - ▣ There is no limitation on the amount of disturbed area
- Common Development
 - ▣ The Plan shall limit the amount of disturbed area to no greater than 50 acres for each individual permittee at any one time, and no more than 50 contiguous acres total at any one time

Part IV.D.3.

50+ Acre Sites

54

- The GA EPD will approve or disapprove such requests within 35 days of receipt
- If the GA EPD approves a request to disturb 50 acres or more at any one time, at least four (4) BMPs from Part III.C.2. (a) – (u) shall be included on the Plan

Part IV.D.3.

7-Day Letter

55

- For Stand Alone, Common Development & non-linear Infrastructure construction activities, the “design professional” who prepared the ES&PC Plan must inspect the installation of the **initial sediment storage requirements and perimeter control BMPs within seven (7) days after installation**
- The “design professional” must report the results of the inspection to the permittee within seven (7) days and the permittee must correct all deficiencies within two (2) business days of receipt of the inspection report.

Part IV.A.5.

7-Day Letter

56

- Alternatively, for linear Infrastructure construction activities, the “design professional” who prepared the ES&PC Plan must inspect the installation of the sediment storage requirements and perimeter control BMPs for the **INITIAL PHASED SUB-PART OR SEGMENT (> 10% of total disturbed area but not < one (1) acre) of the linear infrastructure project and ALL SEDIMENT BASINS** within seven (7) days after installation.
- The “design professional” must report the results of the inspection to the permittee within seven (7) days and the permittee must correct all deficiencies within two (2) business days of receipt of the inspection report.

Part IV.A.5.

Contents of the Plan

57

GENERAL, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST	
GENERAL INFORMATION (Check this box if the Primary and Tertiary Permitted)	
Project Name: _____	Address: _____
City/County: _____	Date of Review: _____
Site: _____	Site No: _____
SITE SPECIFIC CHECKLIST	
<input type="checkbox"/>	1. The vehicle Clean, Sealed and Tidy (CS&T) Plan (Check established by the Governor of Jersey) (If not applicable, the following rule applies)
<input type="checkbox"/>	2. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	3. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	4. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	5. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	6. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	7. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	8. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	9. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	10. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	11. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	12. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	13. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	14. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	15. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	16. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	17. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	18. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	19. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	20. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	21. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	22. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	23. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	24. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	25. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	26. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	27. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	28. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	29. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	30. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	31. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	32. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	33. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	34. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	35. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	36. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	37. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	38. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	39. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	40. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	41. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	42. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	43. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	44. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	45. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	46. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	47. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	48. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	49. The CS&T Plan is included in the ES&PC Plan (If not applicable)
<input type="checkbox"/>	50. The CS&T Plan is included in the ES&PC Plan (If not applicable)

- The ES&PC Plan shall include “BMPs”, including sound conservation and engineering practices, which are consistent with, and no less stringent than the “Manual”

Part IV.D.

Permittee Inspection Results

61

- If BMP deficiencies are identified during an inspection, the BMP deficiencies should be documented and corrected as soon as practical
 - ▣ If corrective action requires a revision to the Plan, the Plan must be revised within 7 calendar days of the inspection.
 - ▣ Any Plan revisions must be implemented within 7 calendar days of the inspection.

Part IV.D.4.a-c.(5)

Permittee Inspection Results

62

- If BMP deficiencies are identified during a Secondary Permittee inspection, the Secondary Permittee must notify the Primary Permittee of any suspected BMP design deficiencies within 24 hours
 - ▣ Primary Permittee must evaluate any suspected BMP design deficiencies within 48 hours of notice.
 - ▣ Any Plan revisions affecting their site(s) must be implemented by the Secondary Permittee within 48 hours of notice.

Part IV.D.4.a-c.(5)

Permittee Inspection Reports

63

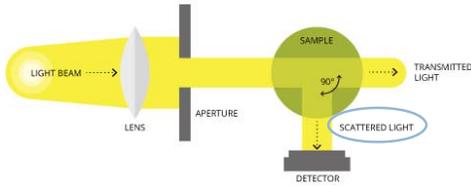
- | | |
|---|--|
| <ul style="list-style-type: none">1) Name(s) of certified personnel2) <u>Signature</u> of certified personnel3) Date(s) of each inspection4) Phase of construction5) Observations relating to the implementation of the Plan6) Corrective actions7) Incidents of non-compliance8) Where reports do not identify any incidents of non-compliance, the report must contain a <u>certification statement</u> that the site is in compliance with the ES&PC Plan and the Permit. | <ul style="list-style-type: none">□ All inspection reports must be <u>retained at the site</u> (or readily available at a designated alternative location)□ All permit violations (Part V.A.(2)) must be documented in the site records within 7 days of discovery and a <u>report</u> of these violations must be submitted to the appropriate GA EPD District Office within 14 days of discovery. |
|---|--|

Part IV.D.4.a-c.(6)

Nephelometric Turbidity Units

67

Measurement of the amount of light passing through a sample of water



Sampling Methodology

68

- The analytical method included on the ES&PC Plan must include quality control/quality assurance procedures
- The narrative on the ES&PC Plan must include a precise sampling methodology for each sampling location
- All sampling shall be collected by “grab samples” and analyzed in accordance with the methodology and test procedures established by [40 CFR Part 136](#) & “[NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-011](#)”

Part IV.D.6.

Sampling

69

- Containers should be labeled prior to collection
- Large, well cleaned glass or plastic jars should be used for collecting samples
- The samples should be taken from the center of the receiving water
- The container should be held so that it faces upstream
- The samples should be kept free of floating debris
- Samples should be analyzed within 48 hours after collection



Part IV.D.6.

Sample Methodology

70

Outfall Sampling Methodology

A rationale must be included on the Plan for the NTU limit(s) selected from Appendix B rationale

Receiving Waters Methodology

The increase in turbidity from the Upstream sample to the Downstream sample shall not be more than:

- ≤ 10 NTUs (Cold Water)
- ≤ 25 NTUs (Warm Water)

Part III.D.5.

Part III.D.4.

Appendix B Rationale

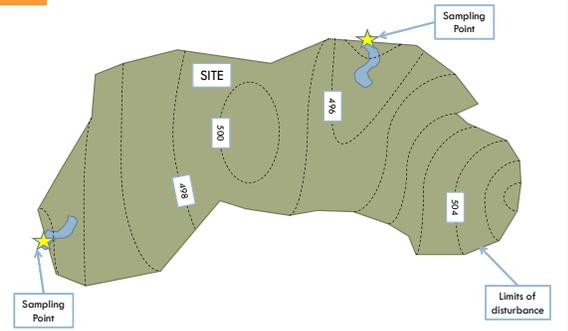
71

Waters Supporting Warm Water Fisheries

Site Size acres	Surface Water Drainage Area square miles							
	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
1.00-10	75	150	200	400	750	750	750	750
10.01-25	50	100	100	200	300	500	750	750
25.01-50	50	50	100	100	200	300	750	750
50.01-100	50	50	50	100	100	150	300	600
100.01 +	50	50	50	50	50	100	200	100

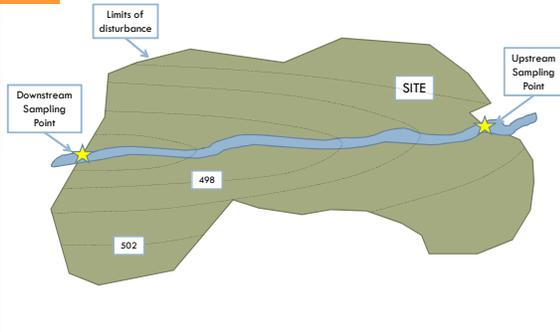
Sampling Points - Outfall

72



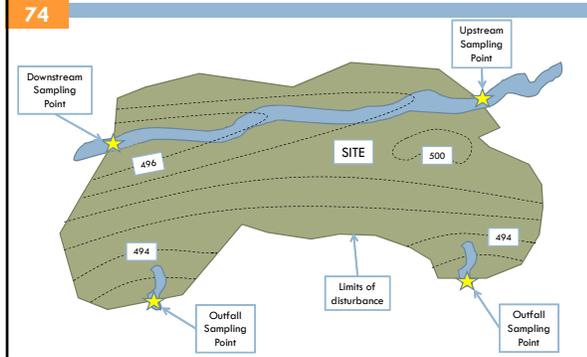
Sampling Points – Receiving Waters

73



Sampling Points – Combination

74



Sampling Frequency

75

□ Samples from the following qualifying events shall be taken **no more than twelve (12) hours** after the beginning of the storm water discharge:

- 1) The first rain event that reaches or exceeds 0.5 inch after all clearing and grubbing operations have been completed, but prior to completion of mass grading operations
- 2) The first rain event that reaches or exceeds 0.5 inch either ninety (90) days after the first sampling event or after all mass grading operations have been completed, but prior to submittal of a NOT

Part IV.D.6.d.3(a-b)

Additional Sampling

76

- If any BMPs on site are not properly designed, installed, and maintained, turbidity samples shall be taken for each subsequent rain event that reaches or exceeds 0.5 inch until the selected turbidity standard is attained or inspections determine that BMPs have been installed and maintained properly

Part IV.D.6.d.3(c)

Sampling Frequency

77

- Where sampling is required but not possible (or not required because there was no discharge), the primary permittee, or the tertiary permittee, must include a written justification in the inspection report of why sampling was not performed. Providing this justification does not relieve the permittee of any subsequent sampling obligations

Part IV.D.6.d.3(d)

Reporting of Results

78

- Reports should include the following:
 - The rainfall amount, date, location and time of sampling
 - The name of the certified personnel who performed the sampling
 - The date the analyses were performed
 - The time the analyses were performed
 - The name of the certified personnel who performed the analyses
 - References and written procedures
 - Results of the analyses, including instrument readouts
 - Results which exceed 1000 NTU shall be reported as "exceeds 1000 NTU"
 - Certification statement that sampling was conducted per the plan

Part IV.E.2.(a-i)

Retention of Records

82

- All of the previous records plus the Notice of Termination must be retained by the permittee who either produced or used it for a period of at least three (3) years from the date the NOT is submitted
- This period may be extended by request of the GA EPD at any time

Part IV.F.4.

83

Part VI. Termination of Coverage

Eligibility
Contents
Submittal

Notice of Termination

84

- Eligibility
 - All planned construction activities have been completed
 - Where the entire site has undergone final stabilization
 - All storm water discharges have ceased
 - The site is in compliance with the permit
 - All temporary BMPs have been removed

Part VI.A.1.

“Final Stabilization”

85

- All soil disturbing activities at the site have been completed, and that for unpaved areas and areas not covered by permanent structures, 100% of the soil surface is uniformly covered in permanent vegetation with a density of 70% or greater, or landscaped according to the Plan (uniformly covered with landscaping materials in planned landscaped areas), or equivalent permanent stabilization measures as defined in the “Manual” (excluding a crop of annual vegetation and seeding of target perennials appropriate for the regions)

Part I.B. defn.

Termination Eligibility

86

- The primary permittee of a **Common Development** may submit a Notice of Termination, even if all planned construction activities have not been completed, if and only if:
 - Construction activities have ceased for ninety (90) days
 - Final stabilization has been implemented by the primary and all secondary permittees
 - All secondary permittees have submitted a NOT
 - The site is in compliance with the Permit
 - All temporary BMPs have been removed

Part VI.A.1.

Termination Eligibility

87

- The primary permittee of an **Infrastructure Construction** project may submit a Notice of Termination for each phase of the project, not to exceed four (4) phases
- The disturbed acreage for each phase must be equal or greater than 25% of the total disturbed acreage – except for the final phase
- For the final phase, the disturbed acreage must be equal to or greater than 10% of the total estimated disturbed acreage

Part VI.A.1.

Contents

88

- The project site name and location – must correspond to NOI
- The owner/operator's legal name, address, telephone, and email
- Indication whether permittee is primary, secondary, or tertiary
- The name of the receiving water(s)
- Copies of all sampling reports
- Copy of NOI
- Signed Certification Statement

Part VI.B.

Submittal

89

- All Notices of Termination shall be submitted by return receipt mail to the appropriate GA EPD District Office **AND** Local Issuing Authority (LIA) in jurisdictions authorized to issue Land Disturbing Activity (LDA) permits

Part VI.C.

NPDES Construction Storm Water General Permits 2018 Updates

90

- GAR100001 – Stand Alone Construction
- GAR100002 – Infrastructure Construction
- GAR100003 – Common Development Construction

- Current Permits – Expire on July 31, 2018
- Revised Permits become effective August 1, 2018
 - Expire 5 years

- Signed Permits are available on GAEPD website:
<https://epd.georgia.gov/npdes-construction-storm-water-general-permits>

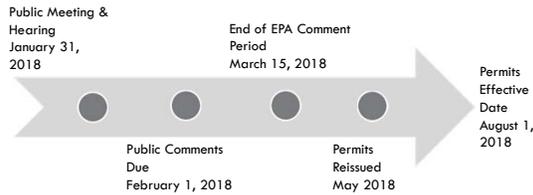
Permit Process

91



Permit Process

92



Significant Changes – All Permits Definition change

93

- "Permittee" means any entity that has submitted a Notice of Intent and obtained permit coverage.
- "Infeasible" means not technologically possible, or not economically practicable and achievable in light of best industry practices

Part I.B. defn.

Significant Changes – All Permits

94

- Electronic Submittal & Reporting Rule Changes – Multiple Parts of each Permit

- Removed paragraph allowing 21 days to stabilize for temporarily ceased construction activities – Part IV.D.3.a.(1).(b).

Significant Changes – All Permits

95

- Covering of Waste Materials in accordance with 40 CFR Section 450.21(d)(2) – Part IV.D.3.c.(2)

“For building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site, provide cover (e.g. plastic sheeting, temporary roofs) to minimize the exposure of these products to precipitation and to stormwater, or a similarly effective means designed to minimize the discharge of pollutants from these areas. Minimization of exposure is not required in cases where exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk to stormwater contamination (such as final products and materials intended for outdoor use).”

Significant Changes – All Permits

96

- Removed BMPs for impaired waters that are no longer above and beyond – Part III.C.2.
 - Removed m. “Apply appropriate GDOT approved erosion control matting or blankets or bonded fiber matrix to all slopes steeper than 3:1. All graphical illustrations must be included on the Plan.”
- Changed “anionic PAM” to “flocculants and coagulants” and “matting or blankets” to “slope stabilization”
- Revised and added new BMPs for Impaired Waters – Part III.C.2.a.-v:
 - Sign and Online ES&PC Plan Available on website provided by the permittee
 - Additional Inspections during ES&PC Plan Phases
 - Installation of Post Construction BMPs with 80% TSS removal rates

Significant Changes – All Permits

97

- Revised Inspection Requirements for Rainfall Monitoring - Part IV.D.4.a.(2)

“Measure and record rainfall within disturbed areas of the site that have not met final stabilization once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday. The data collected for the purpose of compliance with this permit shall be representative of the monitored activity.”

Significant Changes – All Permits

98

Added Language for BMP Deficiencies or Failures – Part III.D.3.

- Whenever a permittee finds that a BMP has failed or is deficient (beyond routine maintenance) and has resulted in sediment deposition into waters of the State, the permittee shall immediately take all reasonable steps to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events. The permittee shall submit a summary of the violations to EPD in accordance with Part V.A.2. of this permit and shall correct such BMP as follows:
 - When the repair does not require a new or replacement BMP or significant repair, the BMP failure or deficiency must be repaired within two (2) business days from the time of discovery;
 - When the repair requires a new or replacement BMP or significant repair, the installation of the new or modified BMP must be completed and the BMP must be operational by no later than seven (7) days from the time of discovery. If it is infeasible to complete the installation or repair within seven (7) days, the permittee must document why it is infeasible to complete the installation or repair within the seven (7) day timeframe and document the schedule for installing or repairing the BMPs and making the BMPs operational as soon as feasible after the seven (7) day timeframe.

Significant Changes – All Permits

99

- Revised Continuing Obligations of Permittees – Part I.E.

“Unless and until responsibility for a site covered under this permit is properly terminated or ownership changes, according to the terms of the permit, the current permittee remains responsible for compliance with all applicable terms of the permit and for any violations of said terms,”

- Minor administrative changes (i.e. removed hyperlinks and redundant language)

Significant Changes – Infrastructure

100

GAR100002 – Infrastructure Permit

- Added Cable Barrier Exemption
- Added Fiber Optic Installation Exemption
- Revised Definition of Phase or Phased

Cable Barrier Exemption

101

- Part 1.C.1.f. coverage under this permit is not required for discharge of storm water associated with infrastructure road construction projects that consist solely of the installation of cable barriers and guard rail for an existing facility within the existing rights-of-way. The construction activity shall, as a minimum, implement and maintain best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity is being conducted. In order to be eligible for this exemption the project must comply with the following conditions: (1) no mass grading shall occur on the project, (2) the project shall be stabilized by the end of each day with temporary or permanent stabilization measures, (3) final stabilization must be implemented at the end of the project.

Fiber Optic Installation Exemption

102

- Part 1.C.1.g. coverage under this permit is not required for discharge of storm water associated with infrastructure construction projects that consist of the installation of buried utility lines and comply with the following conditions: (1) solely installed via vibratory plow, (2) the conduit does not exceed 4 inches in diameter, and (3) occurs within an existing stabilized right-of-way. The construction activity shall, as a minimum, implement and maintain best management practices, including sound conservation and engineering practices to prevent and minimize erosion and resultant sedimentation, which are consistent with, and no less stringent than, those practices contained in the "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the Georgia Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity is being conducted. In order to be eligible for this exemption the project must comply with the following conditions: (1) no mass grading shall occur on the project, (2) no tree clearing, (3) no change in grade, (4) the project shall be stabilized by the end of each day with temporary or permanent stabilization measures, and (5) final stabilization must be implemented at the end of the project

Revised Definition of Phase or Phased

103

- "Phase" or "Phased" means sub-parts, **sections** or segments of infrastructure construction ~~projects~~ **sites** where the sub-part, **section** or segment is constructed and stabilized prior to completing the entire construction site.

Part I.B. defn.

Summary

104

- NPDES Permits govern land disturbance of one (1) acre or more and individual lots within a common development
- Notice of Intent has to be submitted fourteen (14) days prior to the commencement of construction activities
- All ES&PC Plan contents can be found in Part IV. of the permits
- Notice of Termination can only be filed once the site has reached final stabilization

105

Questions?

GSWCC
Urban Program
4310 Lexington Road
Athens, GA 30605
(706) 552-4474



Insert Tab

GEOS

Back of Tab



Getting Started in GEOS

Presented by Jessica Jones, Licensing Technician, NE District Office, Georgia EPD



INTRODUCTION

- GEOS – Georgia EPD Online System
- How to get there
 - epd.georgia.gov
 - “GEOS Guidance”
- What to do before creating a submittal
 - Responsible Official (RO) vs Preparer
 - If you are a Preparer, RO must create an account in GEOS as well
- Create your account
 - “Storm Water Construction”



IMPORTANT POINTS

- 50+ Acres
- Submittal ID
- 14-day Clock
 - RO vs Preparer
- Track Submittals
- Edit Pending
 - If it was not submitted, it will not receive coverage
- Submittal receipt
 - LIAs



ADDITIONAL FUNCTIONS

- Public Portal
- Sampling Reports
- Manage Certification
 - Modify/Terminate/Reissue Coverage
- Contact EPD
- LIA Map
- Manage Consultants/Preparers
 - Delete/Add/Associate to Facilities
- Older Submittals





WHAT HAPPENS NEXT

- Partial vs Complete Submittal
- GEOS Automated Emails
- Agency Review
 - Location Map
 - ES&PC Plans when applicable
 - Fees when applicable





RESOURCES

Georgia Environmental Protection Division
District Offices

- District Offices
 - 7 office locations
- EPD Website
- GEOS Site
- Instructions
- Submittal video
- Training





GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

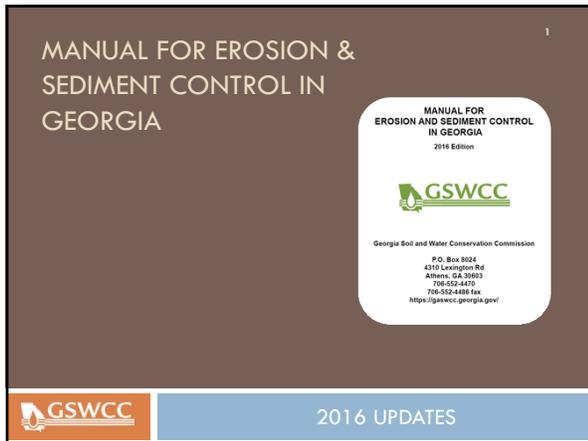
Questions?



Insert Tab

2016 Manual Update

Back of Tab



Manual For Erosion and Sediment Control in Georgia

2

Chapter 1 - The Erosion and Sedimentation Act of 1975

- Minor revisions were made to content
- Existing pictures were replaced with new ones

Chapter 2 – Sediment and Erosion Control Processes, Principles and Practices

- Minor revisions were made to content
- Updated to include new Best Management Practices
- Existing pictures were replaced with new ones

Manual For Erosion and Sediment Control in Georgia

3

Chapter 3 - Planning and Plans

- Minor revisions were made to existing content
- Added two new sections:
 - “Coordination of Erosion and Sediment Control with Post-Construction Stormwater Management”
 - “Low Impact Development”
- The Erosion and Sedimentation and Pollution Control Plan has been updated to reflect requirements of O.C.G.A 12-7-1 and the NPDES Permits

Manual For Erosion and Sediment Control in Georgia

4

Chapter 4 - Local Programs: Principles and Processes

- Minor revisions were made to existing content

Chapter 5 – Sources of Assistance and Resource Information

- Contact information and maps have been updated

Manual For Erosion and Sediment Control in Georgia

5

Chapter 6 – BMP Standards & Specifications

- Revised existing BMPs
- Added new structural and vegetative BMPs
- Remove/added mandatory and advisory conditions (should vs. shall) for BMP criteria

Appendix A-2: Joining the Equivalent BMP List: Background and Purpose

6

- The allowance of the efficient addition of proven BMPs that are at least as stringent as the Manual for Erosion and Sediment Control recognizes the dynamic growth and technological advancements in the area of BMP development.
- The use of alternative BMPs whose performance has been documented to be equivalent or superior to conventional BMPs as certified by a Design Professional may be allowed (unless disapproved by EPD or the State Soil and Water Conservation Commission).
- The 2016 Manual includes a new process, found in Appendix A-2, in which new BMP's can be submitted to the GSWCC for inclusion on the Equivalent Best Management Practice List. **This list is compiled from BMP's which have been previously approved by GSWCC and the GADOT prior to January 1st, 2016.**

Appendix A-2: Joining the Equivalent BMP List: Alternative BMP Guidance

7

1. One page summary detailing why the alternative BMP is equivalent or superior to the conventional BMPs found in the Manual.
2. Documented side by side testing (alternative BMP vs. conventional BMP) using the appropriate design requirements and specifications contained in the Manual.
3. Proof that the alternative BMP was previously installed and worked under conditions comparable to the environmental conditions of the proposed site. This can be documented with photographs.
4. All specifications including the design requirements and the procedures for proper installation and maintenance.

Equivalent BMP Application Pre-notice

8

Appendix A-2: Joining the Equivalent BMP List: Application and Removal Process

9

- For a BMP to be considered for inclusion on the Equivalent BMP List, a **Design Professional** must have successfully completed the current process for Alternative BMPs as outlined by the GSWCC Guidance on at least **3** completed projects where EPD's Notice of Termination Form has been filed.
- **Geographic dispersion of the project sites is encouraged.**
- The following materials should be submitted to the GSWCC
 - An Application to be on the Equivalent BMP List and a **sample** of the BMP.
 - Three sets -- one for each time the Alternative BMP was used in three **separate** projects -- of the required documentation to use the Alternative BMP, based on the current approval process as outlined by GSWCC Guidance. Evidence of repeatable bench and field testing must be included as part of this documentation. Only **approved ASTM** standards or Overview Council-approved standards will be accepted for repeatable bench testing; **working test methods will not be accepted.**
 - Three sets -- one for each time the Alternative BMP was used in three **separate** projects -- of the Notice of Termination Form for each project involving the Alternative BMP.
 - A Certification Form signed by two individuals -- a Level II certified Design Professional and a Level 1A or Level 1B Certified Personnel -- who evaluated the BMP's performance in the field stating that the Alternative BMP performed as expected throughout the life of each of the three projects.
 - Three sets of installation photos -- one for each time the Alternative BMP was used -- of the Alternative BMP utilized in the three projects.
 - Three sets of after-storm event photos -- one for each time the Alternative BMP was used -- of the Alternative BMP utilized in the three projects.
 - Any post-storm event inspection records as well as inspection and enforcement records made by any federal, state, or local regulatory agency related to this specific BMP on this project.

Appendix A-2: Joining the Equivalent BMP List: Transition Period

13

- The Equivalent BMP List became effective January 1, 2016.
- Applications for BMPs to be included on the Equivalent BMP list will be based on NOI'S submitted on or after January 1, 2016.
- GSWCC's approval of a BMP, however, does not ensure GDOT's adoption of that item into their QPL, design policies, or procedures.
- As of January 1, 2016, any product that seeks to be on the GDOT QPL List must first go through the Equivalent BMP process.
- The first update to the Equivalent BMP list occurred after March 31, 2016.

Chapter 6 – BMP Standards and Specifications for Land Disturbing Activities

14

Revised BMPs

- Tackifiers (Tac) - (Vegetative)
- Sediment barriers (Sd1) - (Structural)
- Construction Exit (Co) – (Structural)
- Matting & Blankets (Mb) - (Vegetative)
- Check Dam (Cd) - (Structural)
- Channel Stabilization (Ch) - (Vegetative)
- Temporary Downdrain Structure (Dn1) – (Structural)
- Retrofit (Rt) – (Structural)
- Temporary Stream Crossing (Sr) – (Structural)

Chapter 6 - Revised BMP

Ss

15

Matting and Blanket (Mb) –No longer a stand alone BMP, it is now called **Slope Stabilization (Ss)**

- This BMP now incorporates:
 - Hydraulic erosion control products (HECP)
 - Rolled erosion control products (RECP)



Chapter 6 - Revised BMP

Tac

16

- Tackifiers and Binders (Tb) was changed to **Tackifiers (Tac)**.
- Tackifiers are used as a tie-down for soil, compost, seed, straw, hay or mulch. Tackifiers hydrate in water and

Only anionic forms shall be used



Chapter 6 - Revised BMP

Tac

17

- There are five types of Tackifiers. These blends take into account different blends of synthetic and/or organic polymers.
- For general use, the tackifier must meet the specifications in the Manual. To be used in other BMP applications, such as Slope Stabilization or Channel Stabilization, please refer to that BMP for specifications.

Guar is annual legume. It is an organic tackifier



Chapter 6 - Revised BMP

Sd1

18

□ Sediment Barriers (Sd1)

- The 2016 Manual clarifies the use of Type A, B, C Silt Fences in Non-Sensitive and Sensitive Areas.
- Type C will be classified as Sensitive and Type A and B as Non-Sensitive.
- Type C definition was amended to include wire, or equivalent, reinforcement.
- The 2016 Manual clarifies that mulch berms and compost socks are types of sediment barriers.



Chapter 6 - Revised BMP

Sd1

19

- Two rows of Type S sediment barrier are still to be used along all state water and sensitive areas, but **should be** placed at least 36 inches apart.
- Information is given about the static slicing and the traditional trenching method.
 - This information came directly from EPA.

Sediment barriers shall be replaced whenever they have deteriorated to such an extent that the effectiveness of the product is reduced (approximately six months) or the height of the product is not maintaining 80% of its properly installed height.

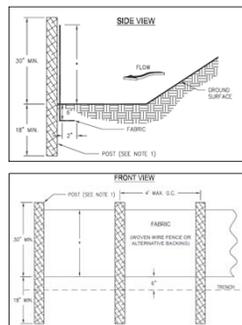


Chapter 6 - Revised BMP

Sd1

20

- Sediment Barriers (Sd1) incorporate BMPs other than silt fence for perimeter control.
- When a Sediment Barrier is used, the product height in inches for each barrier being used must be shown on the plans.
- Sediment Barriers must be maintained at half their height regardless of size.



Chapter 6 - Revised BMP

Co

21

- Construction Exit (Co)**
 - Pad Length – The gravel pad shall have a minimum length of 50 feet. When the construction is **less than 50 feet** from the paved access, **the length shall be from the edge of existing pavement to the permitted building being constructed.**

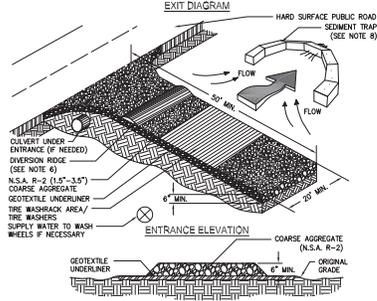


Chapter 6 - Revised BMP

Co

22

CRUSHED STONE CONSTRUCTION EXIT



Chapter 6 - Revised BMP

Cd

23

Check Dam (Cd)

- Practices will be categorized as follows
 - Stone Check Dams (Cd-S)
 - Straw-Bale Check Dams (Cd-Hb)
 - Compost Filter Sock (Cd-Fs)

TO BE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN

1. cfs in the channel/ditch that the check dam is being used in: _____
2. Above 2.0 cfs: Yes _____ No _____
3. If Yes, list BMP being used in conjunction with check dams: _____

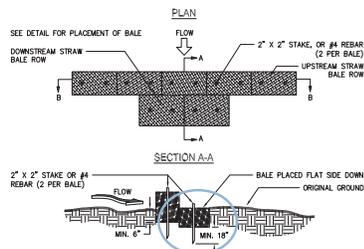
Chapter 6 - Revised BMP

Cd

24

- Most notable change in check dams is the installation of the straw bale check dam.

TYPICAL STRAW BALE CHECK DAM



Check Dam – Hay Bale



25



Chapter 6 - Revised BMP

Ch

26

Channel Stabilization (Ch)

Products will be categorized as followed:

- Category 1 (0-5 ft/sec)
Vegetated Lining with Blankets
- Category 2 (5- 10 ft/sec)
Vegetated Lining with TRM or
Rip Rap Lining
- Category 3 (> 10 ft/sec)
Concrete Lining



Chapter 6 - Revised BMP

Dn1

27

Temporary Downdrain Structure (Dn1)

For slopes steeper than 2:1, slope drains should be placed **diagonally** across the slope, extending the drain beyond the toe of the slope. Curve the outlet uphill and adequately protect the outlet from erosion.



Chapter 6 - Revised BMP

Rt

28

□ Retrofit (Rt)

- "A device or structure placed in front of a permanent stormwater detention pond outlet **or roadway drainage structure** to serve as temporary sediment filter."

□ Silt Control Gate (Rt-Sg)

- May be used for temporary sediment storage on linear construction projects including roadway construction or maintenance, and utility line installation.
- Drainage area shall not exceed 50 acres.

Chapter 6 - Revised BMP

Rt

29



Chapter 6 - Revised BMP

Sr

30

□ Temporary Stream Crossing (Sr)

- Revised language



"Temporary stream crossings should not be used on streams with drainage areas greater than one square mile (640 acres), **unless specifically designed to accommodate the additional drainage area by the design professional.**"

Chapter 6 – BMP Standards and Specifications
for Land Disturbing Activities

31

New BMPs

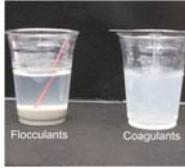
- Flocculants/Coagulants (FI-Co) - (Vegetative)
- Slope Stabilization (Ss) - (Vegetative)
- Filter Surface Skimmer (Sk) - (Structural)
- Seep Berm (SpB) - (Structural)
- Temporary Sediment Trap (Sd4) - (Structural)
- Turbidity Curtain (Tc) - (Structural)
- Tree Protection (Tr) - (Structural)

Chapter 6 New BMPs

FI-Co

32

- **Flocculants & Coagulants (FI-Co)**
- Formulated to assist in the solids/liquid separation of suspended particles.
- There will be no FI-Co on the Equivalent BMP List. Any product may be used as long as it conforms to the criteria set forth in the Manual.
- Only anionic forms shall be used.



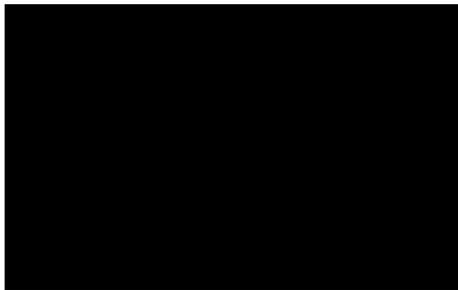
Flocculants FI-Co

VIDEO



hover cursor over slide to activate control bar at bottom

33



Coagulants **Fl-Co** VIDEO 
hover cursor over slide to activate control bar at bottom

34



Chapter 6 New BMPs **Sk**

35

□ Floating Surface **Skimmer (Sk)**:

- A skimmer drains the water from the top allowing cleaner less turbid water to discharge from the ponding area.
- An emergency spillway is required when using a skimmer.
- It should not be used in conjunction with Rt.
- It can replace the riser pipe as the principal spillway.
- If a skimmer cannot be used, a rationale/justification must be given.

Skimmers are 1 option to meet NPDES Part IV.D.3.a(3) requirement



Chapter 6 New BMPs **Sk**

36

□ Floating Surface Skimmers require the following to be shown on the erosion control plan:

There is no min/max, shall be specified by design professional

TO BE SHOWN ON THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN

When a FLOATING SURFACE SKIMMER is used, show the following information along with each sediment pond, trap or basin being used on the site:

1. Pond, trap or basin size, length* (top and bottom) width* (top and bottom) and depth = _____
2. Time to Drain (hrs) = _____
3. Skimmer Dimensions (orifice and head size)** _____
4. Manufacturer's name _____

There is not an equivalent list of manufacturers for skimmers. Any person utilizing a home-made skimmer, accepts liability for its use. Their name would be the manufacturer. *feet, ** inches

Floating Surface Skimmer

Sk

VIDEO



hover cursor over slide to activate control bar at bottom

37



Chapter 6 New BMPs

SpB

38

Seep Berm (SpB)

- A seep berm is a linear control device constructed as a diversion perpendicular to the direction of the runoff to enhance dissipation and infiltration of runoff, while creating multiple sedimentation chambers with the employment of intermediate dikes.
- To allow the 2 year storm event, 24 hour design storm to seep out while allowing larger flows to be diverted to a sediment storage area.
- If a fill berm is utilized it is very important that it has proper compaction and stabilization.
- Berm storage volumes can be figured as function of berm height and watershed gradient.



Chapter 6 New BMPs

SpB

39

Seep Berm requires the following to be shown on the erosion and sediment control plan:

- Top of Berm Elevation*
- Bottom of Berm Elevation*
- Top of Berm Width *
- Height of the Berm*
- Seep Hole Diameter*
- Distance from the top of the berm to the seep to be placed in accordance with the 2yr-24hr storm*
- Type of Seep
 - PVC
 - Metal
 - Other(specify)
- Spacing of Seep Along the Berm*

* shown in ft.

Chapter 6 New BMPs

Sd4

40

Temporary Sediment Trap (Sd4)

- This BMP was added to provide sediment storage options for smaller sites.
- This is effective against coarse sediment, not silt or clay particles that remain suspended.
- All Sd4's are to be cleaned out at 1/3rd full
- Provides three options
 - Overflow
 - Combination
 - Rock



$$V = 0.4 \times A \times D$$

Chapter 6 New BMPs

Sd4

41

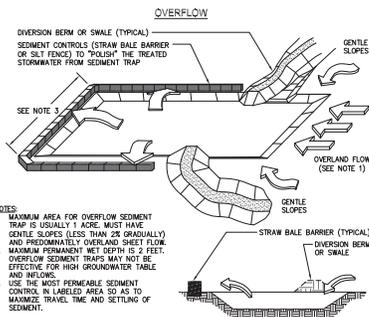
1. Temporary Sediment Trap - **Overflow** (Sd4-A)

- An overflow temporary sediment trap is limited to small areas less than 1 acre.
- The maximum life span of an overflow trap is 6 months.
- Silt fence, straw bale barriers or grass filter strips are used to "polish" the overflow water as it leaves the sediment trap.

Sd4-A Detail

Sd4

42



Chapter 6 New BMPs

Sd4

43

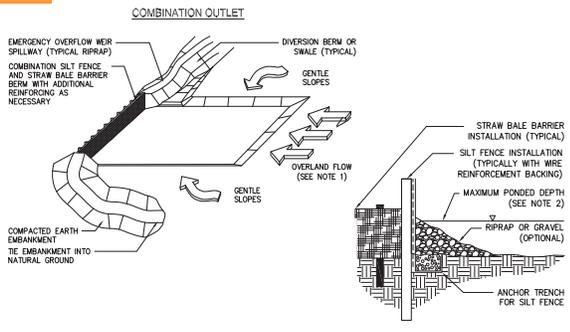
2. Temporary Sediment Trap – **Combination Outlet** (Sd4-B)

- ▣ The combination outlet uses straw bales and silt fence to dewater the sediment trap.
- ▣ Proper installation and staking of the straw bales, and wire backing on the silt fence are required for the materials to resist 1 foot or more of ponded water.
- ▣ The combination straw bale and silt fence outlet is limited to 1 acre total drainage area, and has a life span of less than 1 year.

Sd4-B Detail

Sd4

44



Chapter 6 New BMPs

Sd4

45

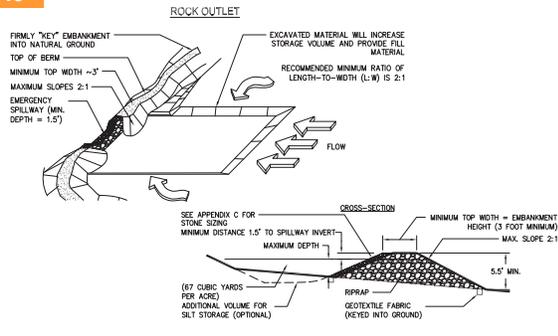
3. Temporary Sediment Trap – **Rock Outlet** (Sd4-C)

- ▣ The rock outlet relies on filtering through layers of aggregate, rock or riprap material to dewater the sediment trap.
- ▣ It is the most sturdy of the sediment trap designs and generally requires less maintenance.
- ▣ It can be used for drainage area up to 5 acres and has a life span of 1 year.

Sd4-C Detail

Sd4

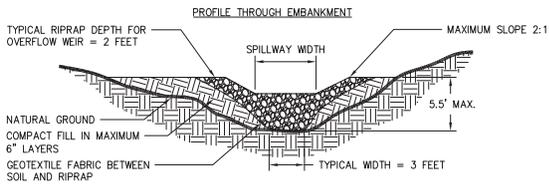
46



Sd4-C Detail

Sd4

47



Chapter 6 New BMPs

Tc

48

□ Turbidity Curtain (Tc)

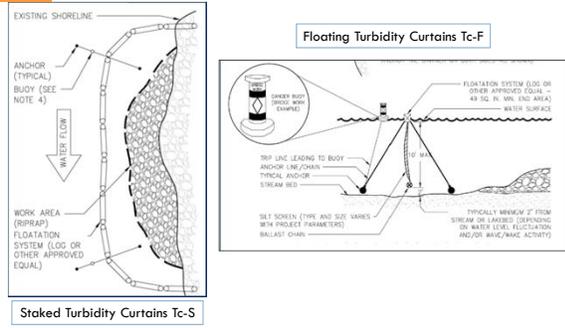
- A floating or staked barrier installed within the water. (It may also be referred to as a floating boom, silt barrier or silt curtain).
- Not to be used as sediment storage
- Turbidity Curtain is installed to minimize turbidity and silt migration from work occurring within the water or as a supplement to perimeter control BMPs at the water's edge.
- Silt or turbidity is confined to the area within the boundary created by the installation, such that suspended particles drop out of the water column over time.



Chapter 6 New BMPs

Tc

49



Chapter 6 New BMPs

Tr

50

- To protect desirable trees from injury during construction activity.
- Tree Protection Zones:
 - (1) Measure the diameter of the tree trunk in inches at 4.5 feet from the ground. This is called the Diameter Breast Height or DBH.
 - (2) Multiply this value by 1.5. This result is the diameter of the root protection zone in feet. This is also considered the critical rooting distance.
- Tree Protection (Tr)



“If it’s green, it’s clean”

51

- BMPs are used in series to provide a defense against erosion on land disturbance sites using both vegetative and structural measures



52

Questions?

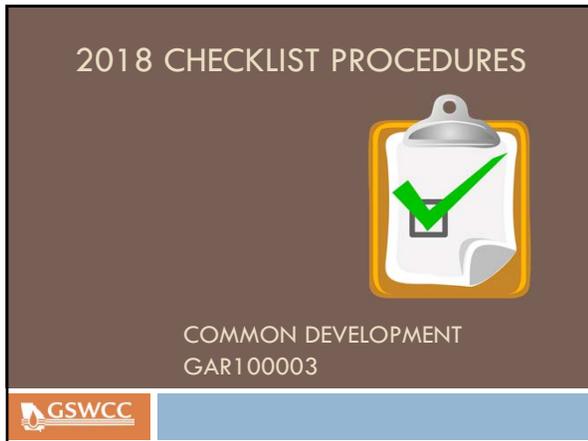
GSWCC
Urban Program
4310 Lexington Road
Athens, GA 30605
(706) 552-4474



Insert Tab

Checklist

Back of Tab



#1

2

- The applicable Erosion, Sedimentation, and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted.
- NPDES Construction Stormwater General permits were revised May 2018 and will become effective August 1, 2018
- The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed.

#2

3

- Level II certification number issued by the Commission, signature, and seal of the certified design professional.
- Signature, seal, and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed. The Level II certification must be issued to the Design Professional whose signature and seal are on the Plan.

#3

4

- Limit of disturbance shall be no greater than 50 acres at any one time without prior written authorization from the EPD District Office. If EPD approves the request to disturb 50 acres or more at any one time, the Plan must include at least 4 of the BMPs listed in Appendix 1 of this checklist.
- A copy of the written approval by EPD must be attached to the Plan for the Plan to be reviewed.

#4

5

- The name and phone number of the 24-hour local contact responsible for erosion, sedimentation, and pollution controls.
- May be shown on ES&PC Plan sheets and/or ES&PC notes.

24 Hour Contact:
John Doe
555-555-5555

#5

6

- Provide the name, address, email address, and phone number of primary permittee or tertiary permittee.
- May be shown on cover sheet, ES&PC Plan, or under ES&PC notes.

Primary Permittee/Tertiary Permittee:
(Company/Person)
(Address)
(Contact)
(Email Address)
(Phone)

#6

7

- Note total and disturbed acreage of the project or phase under construction.
- Must be shown on ES&PC Plan or under ES&PC notes.

OVERALL SITE AREA: 43.8 ACRES
 TOTAL DISTURBED AREA: 9.7 ACRES

#7

8

- Provide the GPS location of the Construction Exit for the site. Give the Latitude and Longitude in decimal degrees.
- GPS location of the Construction Exit must be shown on cover sheet and may also be shown on ES&PC Plan sheets and ES&PC notes. It must match the NOI.

Co CONSTRUCTION
 EXIT/ENTRANCE
 33.1682° N
 84.8602° W

#8

9

- Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
- The initial Plan date should be shown on all pages. With each resubmittal the revision date and the entity requesting revisions should be shown on cover sheet and each sheet that has been revised.

ISSUE DATE 14 MAR 2014

REVISIONS:	
3/10/16	LIA COMMENTS
3/27/16	LIA COMMENTS

#9

10

- Description of the nature of construction activity.
- Provide a description of the existing site and a description of the proposed project. These must be shown on ES&PC Plan or under ES&PC notes.

The site is currently developed and has one structure on the property. The proposed construction consists of an access drive and grading for a future expansion. The proposed construction will also include landscaping, and a stormwater conveyance system.

#10

11

- Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
- Site location must be delineated showing surrounding area roads and highways. If the project is being done in phases, each individual phase must be delineated and labeled. This information is important for Plan reviewers if a site visit is needed, or if the site needs to be located on another map.



#11

12

- Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, etc. which may be affected.
- The name of the initial receiving water(s) or if unnamed the first named blue line stream indicated on the appropriate USGS topographic map, and when the discharge is through a municipal separate storm sewer system (MS4), the name of the local government operating the municipal separate storm sewer system and the name of the receiving water(s) which receives the discharge from the MS4, and the permittee's determination of the whether the receiving water(s) supports warm water fisheries or is a trout stream. Describe any neighboring area which could be affected by the post-developed runoff from the site.

#12

13

- Design professional's **certification statement and signature** that the site was visited prior to development of the ES&PC Plan as stated on **page 23** of the permit.
- **The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes:**
 - "I certify under penalty of law that this Plan was prepared after a site visit to the locations described herein by myself or my authorized agent, under my supervision."

#13

14

- Design professional's **certification statement and signature** that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on **page 22** of the permit.
- **The following statement and the signature of the design professional must be shown on the ES&PC Plan or under ES&PC notes:**

"I certify that the permittee's Erosion, Sedimentation, and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document "Manual for Erosion and Sediment Control in Georgia" (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land-disturbing activity was permitted, provides for the sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GAR100003."

#14

15

- Clearly note the statement that **"The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation."**
- The Plan must include a statement indicating that the primary permittee must retain the design professional who prepared the Plan, except when the primary permittee has requested in writing and EPD has agreed to an alternate design professional, to inspect the installation of the initial sediment storage requirements and perimeter control BMPs which the design professional designed within seven (7) days after installation. The design professional shall determine if these BMPs have been installed and are being maintained as designed. The design professional shall report the results of the inspection to the primary permittee within seven (7) days and the permittee must correct all deficiencies with two (2) business days of receipt of the inspection report from the design professional unless weather related site conditions are such that additional time is required.

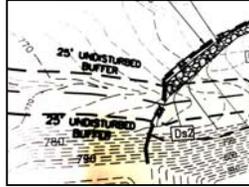
DESIGN PROFESSIONAL 7-DAY VISIT CERTIFICATION	
DATE OF INSPECTION _____	
I CERTIFY THE SITE WAS IN COMPLIANCE WITH THE ES&PC PLAN ON THE DATE OF INSPECTION.	
ES&PC LEVEL & DESIGN PROFESSIONAL: _____	CERTIFICATION # _____
INSPECTION REVEALED THE FOLLOWING DISCREPANCIES FROM THE ES&PC PLAN:	

THE DEFICIENCIES MUST BE ADDRESSED AND AN RE-INSPECTION SCHEDULED. WORK SHALL NOT PROCEED ON THE SITE UNTIL DESIGN PROFESSIONAL CERTIFICATION IS OBTAINED.	

#15

16

- Clearly note the statement that **“Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland-upland interface without first acquiring the necessary variances and permits.”**
- See Part IV. (i) - (iv) on pages 23-26 of the permit and show under ES&PC notes.



#16

17

- Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
- When the project requires an approved buffer variance from the GA EPD, an indication shall be shown on the ES&PC Plan. A description of the encroachment activity must be shown on the ES&PC Plan or under ES&PC notes.

#17

18

- Clearly note the statement that **“Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional.”**
- See Part IV. C. on page 29 of the permit. This can be clarified in a narrative and shown under ES&PC notes. Revisions or amendments should be submitted to the Local Issuing Authority for review.

#18

19

- Clearly note the statement that **“Waste materials shall not be discharged to waters of the State, except as authorized by a section 404 permit.”**
- The Plan must include a description of how waste materials, including waste building materials, construction and demolition debris, concrete washout, excavated sediment, etc., will be properly disposed of. Any disposal of solid waste to waters of the State is prohibited unless authorized by a Section 404 permit.

WASTE MATERIALS

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED A MINIMUM OF ONCE PER WEEK OR MORE OFTEN IF NECESSARY AND TRASH WILL BE HAULED AS REQUIRED BY LOCAL REGULATIONS. NO CONSTRUCTION WASTE WILL BE BURIED ON SITE. ALL PERSONNEL WILL BE INSTRUCTED ON PROPER PROCEDURES FOR WASTE DISPOSAL. A NOTICE STATING THESE PRACTICES WILL BE POSTED AT THE JOBSITE AND THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

#19

20

- Clearly note the statement that **“The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities.”**
- Must be shown on ES&PC Plan or under ES&PC notes.

#20

21

- Clearly note the statement that **“Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source.”**
- Must be shown on ES&PC Plan or under ES&PC notes.

#21

22

- Clearly note the statement that **“Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding.”**
- **Must be shown on ES&PC Plan or under ES&PC notes.**

#22

23

- Indication that the applicable portion of the primary permittees ES&PC Plan is to be provided to each secondary permittee prior to the secondary conducting any construction activity and that each secondary shall sign the Plan or portion of the Plan applicable to their site. List the names and addresses of all secondary permittees.
- **The Plan must contain a list and contact information for all secondary permittees and a statement that the primary permittee shall provide a copy of the Plan (and any subsequent revisions to the Plan) to each secondary permittee. The Plan must include a section for each secondary to sign indicating that they have made a written acknowledgement of receipt of the Plan and a copy of the acknowledgement must be kept in the primary's records.**



#23

24

- Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Biota Impaired Stream Segment must comply with Part III. C. of the Permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment.



If any storm water associated with construction activities discharges into an Impaired Stream Segment that has been listed for the criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macroinvertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff), the ES&PC Plan must include at least four (4) of the BMPs listed in Part III.C.2. (a)-(v) of the Permit. The Impaired Stream Segment(s) should be delineated on the ES&PC Plan. Georgia's most current and subsequent "305(b)/303(d) List Documents (Approved)" can be viewed on the GAEPD website.

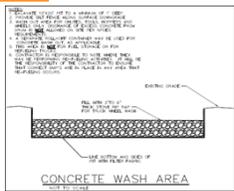
#24

25

- If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in Item 23 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan.
- List of TMDL Implementation Plans can be viewed on the GAEPD website, www.gaepd.org
- The TMDL Implementation Plan for sediment should be delineated on the ES&PC Plan.

#25

26



- BMPs for concrete wash-down of tools, concrete mixer chutes, hoppers, and the rear of the vehicles. **Washout of the drum at the construction site is prohibited.**
- When the project allows for the concrete wash-down of tools, concrete mixer chutes, hoppers, and the rear of the vehicles on the project site delineate the location of the area provided for washing and provide detail of BMPs that will be used. If the project does not allow for the concrete wash-down on the project site, note that on the Plan.

#26

27

- Provide BMPs for the remediation of all petroleum spills and leaks.
- The Plan must provide BMPs and guidance for the prevention of spills and leaks of petroleum products from any areas where such products are stored or used as well as guidance for the proper remediation of any spills and leaks that do occur. This information can be in the form of a separate Spill Prevention/Spill Response document so long as that information accompanies the Plan.

Spill Cleanup and Control Practices

- Local, State and manufacturer's recommended methods for spill cleanup will be clearly posted and procedures will be made available to site personnel.
- Material and equipment necessary for spill cleanup will be kept in the material storage areas.
- Typical materials and equipment includes, but is not limited to, brooms, shovels, mops, rags, gloves, goggles, oil filter, sand, absorbent pads and spill waste containers.
- Spill prevention practices and procedures will be reviewed after a spill and adjusted as necessary to prevent future spills.
- All spills will be cleaned up immediately upon discovery. All spills will be reported as required by local, State, and Federal regulations.
- FOR SPILLS THAT IMPACT SURFACE WATER (LEAKS A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT: 1-800-426-0001.
- FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT: 1-800-426-0001.
- FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS OCCUR, THE GEORGIA E.P.D. WILL BE CONTACTED WITHIN 24 HOURS.
- FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS OCCUR, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

The contractor shall notify the licensed professional who prepared the Part 1 plans that 100 gallons of petroleum is stored onsite (this includes capacities of equipment) or if any one piece of equipment has a capacity greater than 60 gallons. The contractor will notify a Spill Prevention Consultant and a Countermeasures Plan prepared by that licensed professional.

#27 (New checklist Item)

28

- Description of practices to provide cover for building materials and building products on site.
- The Plan must contain a description of measures, such as plastic sheeting or temporary roofs, to cover building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials in order to minimize exposure to precipitation and to stormwater.

#28

29

- Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed.
- The Plan must contain a description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed. These may include storm water detention and retention structures, use of vegetated swales and natural depressions for flow attenuation or a combination of these practices (sequential systems). The Plan must also include a technical explanation of the basis used to select these practices where flows will exceed pre-development levels. The Plan must indicate that velocity dissipation devices will be placed at discharge locations and along the length of any outflow channel in order to provide a non-erosive flow so that the natural physical and biological characteristics and functions of the water course are maintained and protected. The installation of these devices may be subject to Section 404 of the Federal Clean Water Act.
- Note: The permittee is only responsible for the installation and maintenance of storm water management devices prior to final stabilization of the site and not the operation and maintenance of such structures after construction activities have been completed.

#29

30

- Description of the practices that will be used to reduce the pollutants in storm water discharges.
- The Plan must identify all potential sources of storm water pollution expected to be present on the site and provide a narrative explaining how the pollutants will be minimized in the storm water discharges.

Product Specific Practices

Flammable Liquid Products – Containers for products such as fuels, lubricants, and oils will be inspected daily for leaks and spills. This includes crates, vehicles and machinery daily inspections and regular preventative maintenance of such equipment. Equipment maintenance areas will be isolated away from State Waters, natural drains, and storm water drainage inlets. In addition, temporary fueling tanks shall have a secondary containment liner to prevent/retard site contamination. Discharge of oil, fuel, and lubricants is prohibited. Proper disposal methods will include collection in a suitable container and disposal as required by local and state regulations.

Paints/Ink/Adhesives – All products will be stored in tightly sealed original containers when not in use. Excess product will not be discharged to the storm water collection system. Excess product, materials used with these products, and product containers will be disposed of according to manufacturer's specifications and recommendations.

Concrete Truck Washing – No concrete trucks will be allowed to wash out or discharge surplus concrete or drain wash water onsite.

Fertilizers/Pesticides – These products will be applied at rates that do not exceed the manufacturer's specifications or above the guidelines set forth in the crop establishment or in the GDOT Manual for Erosion and Sediment Control in Georgia. Any storage of these materials will be under roof in sealed containers.

Building Materials – No building or construction materials will be buried or disposed of onsite. All such material will be disposed of in proper waste disposal procedures.

#30

31

- Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e. initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).
- Activity schedule must be site specific. The narrative description and timeline for each phase of construction may be shown on ES&PC Plan sheet or under ES&PC notes.



#31

32

- Provide complete requirements of Inspections and record keeping by the primary permittee or tertiary permittee.
- The Plan must include all of the Inspections and record keeping requirements of the primary permittee as stated in Part IV.D.4.a. – c. on pages 34-40 of the Permit. The complete Inspection and record keeping requirements shall be shown on the Plan under ES&PC notes.

4. Inspections.

a. Permittee requirements.

(1) Each day when any type of construction activity has taken place at a primary permittee's site, certified personnel provided by the primary permittee shall inspect: (a) all areas at the primary permittee's site where petroleum products are stored, used, or handled for spills and leaks from vehicles and equipment and (b) all locations at the primary permittee's site where vehicles enter or exit the site for evidence of on-site sediment tracking. These inspections must be conducted until a Notice of Termination is submitted.

(2) Measure rainfall once every 24 hours except any non-working Saturday, non-working Sunday and non-working Federal holiday until a Notice of Termination is submitted. Measurement of rainfall may be suspended if all areas of the site have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region.

(3) Certified personnel provided by the primary permittee shall inspect the following at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.2 inches rainfall or greater (unless such storm ends after 5:00 PM on any Friday or on any non-working Saturday, non-working Sunday or any non-working Federal holiday in which case the inspection shall be completed by the end of the next business day and/or working day, whichever occurs first): (a) disturbed areas of the primary permittee's construction site; (b) areas used by the primary permittee for storage of materials that are exposed to precipitation; and (c) structural control measures. Erosion and sediment control measures identified in the Plan applicable to the primary permittee's site shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. For areas of a site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region, the permittee must comply with Part IV.D.4.a.6. These inspections must be conducted until a Notice of Termination is submitted.

(4) Certified personnel provided by the primary permittee shall inspect at least once per month during the term of this permit (i.e., until a Notice of Termination is received by EPD) the areas of the site that have undergone final stabilization or established a crop of annual vegetation and a seeding of target perennials appropriate for the region. These areas shall be inspected for evidence of, or the potential for, pollutants entering the drainage system and the occurrence of water(s). Erosion and sediment control measures identified in the Plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

(5) Based on the results of each inspection, the site description control measures identified in the Erosion, Sedimentation and Pollution Control Plan and actions taken in accordance with Part IV.D.4.a.6. of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire or that portion of a construction project that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by and of the second business day and/or working day and shall identify all instances of best management practices that have not been properly installed and/or maintained as described in the Plan. When the report does not identify any incidents, the inspection report shall contain a certification that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit.

(6) A report of each inspection that includes the name(s) of certified personnel making each inspection, the details of each inspection, construction phase (i.e., initial, intermediate or final), major observations relating to the implementation of the Erosion, Sedimentation and Pollution Control Plan, and actions taken in accordance with Part IV.D.4.a.6. of the permit shall be made and retained at the site or be readily available at a designated alternate location until the entire or that portion of a construction project that has been phased has undergone final stabilization and a Notice of Termination is submitted to EPD. Such reports shall be readily available by and of the second business day and/or working day and shall identify all instances of best management practices that have not been properly installed and/or maintained as described in the Plan. When the report does not identify any incidents, the inspection report shall contain a certification that the best management practices are in compliance with the Erosion, Sedimentation and Pollution Control Plan. The report shall be signed in accordance with Part V.G.2. of this permit.

#34

37

- Description of analytical methods to be used to collect and analyze the samples from each location.
- This narrative must be shown on the Plan under ES&PC notes and shall include quality control/assurance procedures and precise sampling methodology for each sampling location.

B. SAMPLE TYPE ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED). THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENTS EPA 823-B-92-007" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPA.

1. SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.
2. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.
3. LARGE MOUTH, WELL CLEANED AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.
4. MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATIC ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.
5. SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPA AS SPECIFIED IN PART IV.E.

#35

38

- Appendix B rationale for NTU values at all outfall sampling points where applicable.
- When the permittee has determined that some or all outfalls will be monitored, a rationale must be shown on the Plan under ES&PC notes which includes the NTU limit(s) selected from Appendix B. This rationale must include the size of the construction site, the calculation of the size of the surface water drainage area, and the type of receiving water(s) (i.e. trout stream or supporting warm water fisheries).

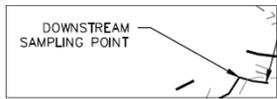
Waters Supporting Warm Water Fisheries

Site Size, acres	Surface Water Drainage Area, square miles							
	0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
1.00-10	75	150	200	400	750	750	750	750
10.01-25	80	100	100	200	300	500	750	750
25.01-50	50	50	100	100	200	300	750	750
50.01-100	50	50	50	100	100	150	300	600
100.01+	50	50	50	50	50	100	200	100

#36

39

- Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged.
- The Plan shall include a USGS topographic map, a topographic map or a drawing (referred to as a topographic map) that is a scale equal to or more detailed than a 1:24000 map showing the locations of the site or the common development. The map must include (a) the location of all perennial and intermittent streams and other water bodies as shown on a USGS topographic map, and all other perennial and intermittent streams and other water bodies located during the mandatory field verification, into which the storm water is discharged and (b) the receiving water and/or outfall sampling locations. When the permittee has chosen to use a USGS topographic map and the receiving water(s) is not shown on the USGS topographic map, the location of the receiving water(s) must be hand-drawn on the USGS topographic map from where the storm water(s) enters the receiving water(s) to the point where the receiving water(s) combines with the first blue line stream shown on the USGS topographic map.



#37

40

- A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs (2) intermediate grading and drainage BMPs and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all of the BMPs into a single phase.
- The Plan must be shown in a minimum of three phases with each phase shown on a separate sheet. Initial phase of the Plan must include the required 67 cy per acre sediment storage, construction exit, tree-save fence if applicable and any other BMPs necessary to prevent sediment from leaving the site such as silt fence, inlet protection on existing storm drain structures, diversions, check dams, temporary ground cover, etc. Limits of disturbance for the initial phase are to be only the areas needed to install initial BMPs. The intermediate phase should show rough grading and utility construction. BMPs should include initial protection, additional silt fence as needed, any revised sediment storage needed as drainage basins are altered, outlet protection, retrofits if applicable, mowing with temporary or permanent vegetation as needed, temporary down drains, filter rings, etc. Final phase of Plan should show finished grade, curbing and paving if applicable, building construction if applicable, etc. BMPs should include permanent vegetation, appropriate inlet protection, etc. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and the final BMPs are the same, the Plan may combine all of the BMPs into a single phase Plan. The Plan will include appropriate staging and access requirements for construction equipment.



Initial Phase



Intermediate Phase

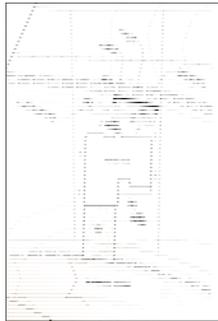


Final Phase

#38

41

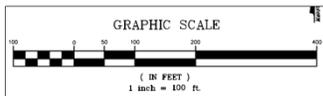
- Plan addresses BMPs for all phases of common development including individual building lots and out-parcels, etc. regardless of who owns or operates the individual sites. Include a typical and any situational lots applicable.
- The Erosion, Sedimentation, & Pollution Control Plans for a common development is designed for the life of the project and must include practices to be implemented by all secondary permittees involved, whether the primary permittee relinquishes ownership of the land rights or not. This includes providing an ES&PC Plan for typical and situational lots for each secondary permittee (builder) who purchases a lot from the primary permittee (developer). Situational lots may include, but are not limited to, lots adjacent to state waters buffers (in which a double row of Type S sediment barriers must be shown adjacent to wetlands, lots with an extreme grade, etc.



#39

42

- Graphic Scale & North Arrow
- The graphic scale and north arrow must be clearly shown on all phases of the ES&PC Plan sheets.



#43

46

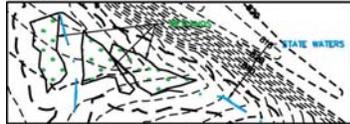
- Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate areas of impact.
- The State Law of Georgia mandates these minimum undisturbed buffers, but the Local Issuing Authority are allowed to require more stringent buffers of state waters. The minimum undisturbed buffers required by the state and all other buffers of state waters required by the issuing authority must be delineated. Any undisturbed buffer area that is impacted by the project site must be noted on the Plan.



#44

47

- Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site.
- ALL STATE WATERS LOCATED ON AND WITHIN 200 FEET OF THE PROJECT SITE MUST BE DELINEATED ON ALL PHASES OF THE PLAN.
- When a project is located in a jurisdiction with a certified Local Issuing Authority and the IA must make a determination of State waters that are not delineated on the Plan, the Plan review could be delayed for beyond the full forty-five day review time allowed to the LIA, or the full thirty-five day review time allowed to the District if the District is reviewing the Plan. For all projects in a jurisdiction where there is no certified Local Issuing Authority regulating that project, EPD is responsible for State waters determinations and there is no time limits for reviewing the Plan.
- ALL WETLANDS LOCATED WITHIN THE PROJECT SITE ONLY MUST BE DELINEATED.
- If the Local Issuing Authority requires an undisturbed buffer of wetlands, delineate required buffer.



#45

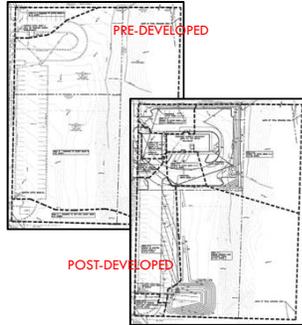
48

- Delineation and acreage of contributing drainage basins on the project site.
- All existing drainage basins on the project site and their acreage must be delineated on the existing conditions and/or on the initial phase of the Plan. As the basins are altered or new ones created during intermediate and final phases, the new basins and their acreage must be delineated throughout each phase of the Plan.



#46

49



- Provide hydrology study and maps of drainage basins for both pre and post developed conditions.
- Hydrology study and drainage maps should be separate from the Plan. Maps should include each individual basin draining to, through and from the project site, with each one delineated, labeled and showing its total acreage.

#47

50

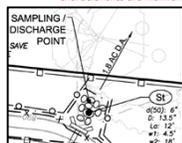
- An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
- The Plan must provide both pre and post construction estimates of the runoff coefficient or peak discharge flow for the site. This can be in the form of a hydrologic study so long as that study is made a part of the Plan and accompanies the Plan. A complete hydrologic study is not required element of the Plan, only the pre and post construction estimates of the run-off coefficient or peak discharge flow for the site.

PRE-DEVELOPED COMPOSITE CN: 57
POST-DEVELOPED COMPOSITE CN: 83

#48

51

- Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.
- The storm-drain pipe and weir velocities must show the flow characteristics of the pipe at full flow including pipe diameter, flow rate (cfs), velocity (fps), and tail-water conditions. This information should be shown in a chart on the storm-drain profile sheet, ES&PC intermediate phase sheet or on the ES&PC detail sheet that shows outlet protection. The dimensions of the apron must include length (L), width at the headwall (W1), down-stream width (W2), average stone diameter (d50), and stone depth (D) designed in accordance with Figures 6-24.1 and 6-24.2 in the Manual. These should be shown in a chart on ES&PC intermediate and/or final phase sheet or ES&PC detail sheet with outlet protection. Velocity dissipation devices shall be placed at all discharge locations and along the length of any outfall channel for the purpose of providing a non-erosive velocity flow from the structure to a water course so that the natural physical and biological functions and characteristics are maintained and protected.



Pipe Chart

Station	From Node	To (Outlet) Node	Drainage Area (ac)	Runoff Coeff.	Average Slope (%)	Estimated Length (ft)	Pipe Diameter (in)	Manning's Roughness (n)	Peak Flow (cfs)	Peak Flow Velocity (fps)	Peak Flow (ft)
PIPE 1	P005 B	P010 A	1.76	0.30	0.010	10,000	18.00	0.010	7.92	2.28	1.24
PIPE 2	P010 A	P015 B	2.42	0.30	0.010	10,000	18.00	0.010	2.36	6.80	1.17
PIPE 3	P015 B	P020 C	2.78	0.30	0.010	10,000	18.00	0.010	1.71	5.00	1.13
PIPE 4	P020 C	P025 D	3.50	0.30	0.010	10,000	18.00	0.010	0.50	1.20	1.13
PIPE 5	P025 D	P030 E	4.17	0.30	0.010	10,000	18.00	0.010	0.81	1.20	1.13
PIPE 6	P030 E	P035 F	4.83	0.30	0.010	10,000	18.00	0.010	0.83	1.61	1.61

#54

58

- Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates, and seeding, fertilizer, lime, and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.
- **Must be shown on ES&PC Plan, on the ES&PC detail sheet or under ES&PC notes.**

SEEDING RATES FOR TEMPORARY SEEDING

Species	Seeding Rate (lb/1000 sq ft)	Seeding Rate (lb/1000 sq ft)	Seeding Rate (lb/1000 sq ft)
Grass	1.00	1.00	1.00
Legume	1.00	1.00	1.00
Grass/Legume	1.00	1.00	1.00
Grass	1.00	1.00	1.00
Legume	1.00	1.00	1.00
Grass/Legume	1.00	1.00	1.00

Ds2 **REPLANTED AREA STABILIZATION**
DATA TEMPORARY SEEDING

Questions?

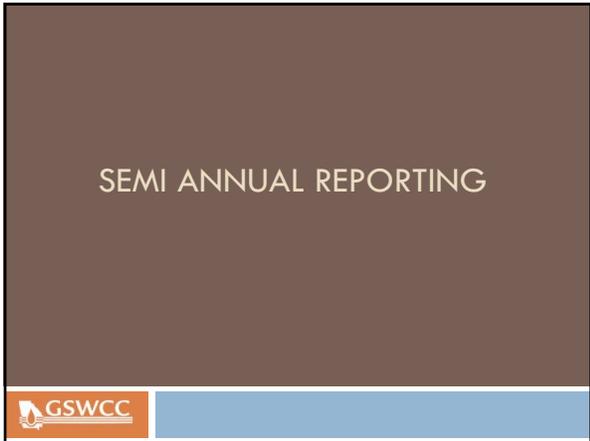
GSWCC
Urban Program
4310 Lexington Road
Athens, GA 30605
(706) 552-4474



Insert Tab

Semi-Annual Report

Back of Tab



Semi-Annual Reporting

2

- HB 463 specifies the Georgia Soil and Water Conservation Commission (GSWCC) is charged with conducting semi-annual overviews of all Local Issuing Authorities (LIA).
- To comply with this mandate, GSWCC has developed the semi-annual report form that must be completed by all LIAs.
- The reports will be reviewed to determine if a more in-depth overview is required.
- If it is deemed necessary to conduct a more in-depth overview, you will be contacted by the GSWCC Urban Water Resources Program.

Semi Annual Reporting

3

- Semi-annual reports must be submitted according to the following timeline:
 - Reporting Period 1 (July 1- December 31) Submitted by January 31
 - Reporting Period 2 (January 1 – June 30) Submitted by July 31

Semi Annual Reporting

4

- Plan Review Summary:

- This part is to be completed only by the Local Issuing Authorities that have a Memorandum of Agreement (MOA) with their District allowing them to review and approve their own ES&PC Plans. If the Local Issuing Authority does not have an MOA with its District, omit this section and skip down to Permitting Summary.

Semi Annual Reporting Plan Review

5

- ES&PC Plan Reviewers
- Total Number of ES&PC Plan Reviewers Employed by the LIA
 - Total Number of ES&PC Plan Reviewers Employed by the LIA that are GSWCC Level II Certified
 - Total number of ES&PC Plan Reviewers employed the Local Issuing Authority that have passed a GSWCC Approved Level II Certification Class.

Semi Annual Reporting Plan Review

6

- ES&PC Plans Reviewed
- Total Number of ES&PC Plans Reviewed for Initial Submittals:
 - This total is for the number of plans that have been reviewed for the first submittal only. Do not include plans that have been reviewed after revisions have been made to the original plan that had been submitted.
 - Average Turnaround Time for Review of Initial ES&PC Plans:
 - This shall be the average number of calendar days taken by the Local Issuing Authority to review the total number of plans reviewed on the initial submittal.

Semi Annual Reporting Plan Review

7

- Total Number of ES&PC Plans Reviewed that Were Revised and Re-submitted:
 - This is for the total number of reviews completed of plans that have been revised and resubmitted. Each review should be counted regardless of how many times a project plan has been revised and re-submitted.
- Average Turnaround Time for Review of Revised Plans That Were Re-submitted:
 - This shall be the average number of days taken by the Local Issuing Authority to review the total number of revised plans that were re-submitted for review.
- Total Number of ES&PC Plans That Were Denied and Sent Back for Revision:
 - This shall include the plans denied on the initial review as well as the total number of plans denied after revisions.
- Total Number of ES&PC Plans Approved:
 - Include plans approved on initial submittal and re-submittals.

Semi Annual Reporting Permitting Summary

8

Permits Issued

- Total Number of Land Disturbance Activity Permits Issued by the LIA for Primary Permittees of **Infrastructure Construction Projects**:
 - Includes the construction, installation and maintenance of roadway projects and conduits, pipes, pipelines, substations, cables, wires, trenches, vaults, manholes and similar or related structures or devices for the conveyance of natural gas, liquid petroleum products, electricity, telecommunications, water or sewage that are not part of a common development.
 - A Primary Permittee is the Owner or the Operator or both of a tract of land for a construction project subject to the NPDES Permit.
- Total Number of Land Disturbance Activity Permits Issued by the LIA for Primary Permittees of **Stand Alone Construction Projects**:
 - Construction activities that are not part of a common development where the primary permittee chooses not to use secondary permittees. These may include schools, churches, restaurants, etc. where the primary permittee may use sub-contractors, but no secondary permittee.

Semi Annual Reporting Permitting Summary

9

- Total Number of Land Disturbance Activity Permits Issued by the LIA for **Primary Permittees of Common Development Construction Projects**:
 - A contiguous area where multiple, separate, and distinct construction activities will be taking place at different times on different schedules under one plan of development. These may include residential sub-divisions, industrial parks, business parks, commercial developments with out-parcels, etc.
- Total Number of Land Disturbance Activity Permits Issued by the LIA for **Secondary Permittees of Common Development Construction Projects**:
 - A secondary permittee is an owner, individual builder, utility company, or utility contractor that conducts a construction activity within a common development.
- Total Number of Land Disturbance Activity Permits Issued by the LIA for **Tertiary Permittees of Common Development Construction Projects**:
 - A tertiary permittee is either the Owner or Operator of a remaining lot(s) within a common development conducting construction activity where the primary permittee and all secondary have submitted a Notice of Termination.
- Total Number of Land Disturbance Activity Permits Issued by the LIA:
 - Total of all LDA permits issued.

Semi Annual Reporting Permitting Summary

10

Acres Disturbed

- Total Number of Disturbed Acres Permitted Within the LIA's Jurisdiction: Total disturbed acreage for all projects permitted by the LIA.



Semi Annual Reporting Inspection Summary

11

Inspectors

- Total Number of ES&PC Inspectors Employed by the LIA:
 - Total of all inspectors employed by the LIA who are responsible for inspections of ES&PC compliance.
- Total Number of ES&PC Inspectors Employed by the LIA That are GSWCC Level 1B Certified:
 - Total of all inspectors employed by the LIA who are responsible for inspections of ES&PC compliance that have successfully completed a GSWCC Level 1B certification course.

Semi Annual Reporting Inspection Summary

12

Site Inspections

- Total Number of ES&PC Inspections Performed on Permitted **Infrastructure Projects**:
 - Includes the construction, installation and maintenance of roadway projects and conduits, pipes, pipelines, substations, cables, wires, trenches, vaults, manholes, and similar or related structures or devices for the conveyance of natural gas, liquid petroleum products, electricity, telecommunications, water, or sewage that are not part of a common development.
- Total Number of ES&PC Inspections Performed on **Stand Alone Projects**:
 - Construction activities that are not part of a common development where the primary permittee chooses not to use secondary permittees.
- Total Number of ES&PC Inspections Performed on Permitted **Common Developments for the Primary Permittee**:
 - A contiguous area where multiple, separate, and distinct construction activities will be taking place at different times on different schedules under one plan of development. The primary permittee is the owner or operator or both of the common development.

Semi Annual Reporting Inspection Summary

13

- Total Number of ES&PC Inspections Performed on Permitted **Common Developments for a Secondary Permittee:**
 - A contiguous area where multiple, separate, and distinct construction activities will be taking place at different times on different schedules under one plan of development. The secondary permittee is an owner, individual builder, utility company, or utility contractor that conducts a construction activity within a common development.
- Total Number of ES&PC Inspections Performed on Permitted **Common Developments for a Tertiary Permittee:**
 - A contiguous area where multiple, separate, and distinct construction activities will be taking place at different times on different schedules under one plan of development. A Tertiary permittee is either the Owner or Operator of a remaining lot(s) within a common development conducting construction activity where the primary permittee and all secondary have submitted a Notice of Termination.
- Total Number of ES&PC Inspections Performed on Permitted Projects by the LIA:
 - Total number of all inspections completed by the LIA.

Semi Annual Reporting Enforcement Summary

14

Non-Compliance

- Total Number of ES&PC Inspections Resulting in a Notice of Violation or Notice to Comply:
 - Total of all site inspections which resulted in a notice of violation or a notice to comply, including stand alone, infrastructure, and common development construction projects.
- Total Number of ES&PC Inspections Resulting in a Stop-Work Order:
 - Total of all site inspections which resulted in a stop-work order, including stand alone, infrastructure, and common development construction projects.
- Total number of Land Disturbance Activities Issued a Citation for ES&PC Non-compliance:
 - Total of all site inspections which resulted in a citation, including stand alone, infrastructure, and common development construction projects.
- Total Amount of Fines Collected for ES&PC Non-compliance:
 - Includes stand alone, infrastructure, and common development construction projects.

Semi Annual Reporting Complaint Summary

15

Complaints Received by the LIA

- Total Number of ES&PC Complaints Received by the LIA: For all land disturbing activities including stand alone, infrastructure, and common development construction projects.
- Total Number of ES&PC Complaints Received by the LIA That were Resolved: For all land disturbing activities including stand alone, infrastructure, and common development construction projects.
- Average Amount of Time Taken by the LIA to Resolve ES&PC Complaints: For all land disturbing activities including stand alone, infrastructure, and common development construction projects.
- Total Number of ES&PC Complaints Referred to EPD That the LIA was Not Able to Resolve: For all land disturbing activities including stand alone, infrastructure, and common development construction projects.

Insert Tab

Overview

Back of Tab

CONDUCTING AN E&SC OVERVIEW



What is an Overview & How is it done?

LIA Oversight

2

- The SWCD and/or GSWCC shall review semi-annually the actions of certified LIA's
 - LIA w/MOA are required to submit additional quarterly reports
- The SWCD and/or GSWCC may provide technical assistance to any county or municipality to improve the effectiveness of their erosion and sedimentation control program
- The GA EPD may periodically review the actions of certified LIA's

O.C.G.A. 12-7-8(b)

3

SOIL AND WATER CONSERVATION DISTRICT
OVERVIEW SCORING
LOCAL ISSUING AUTHORITIES WITHOUT AN MOA

LOCAL ISSUING AUTHORITY: _____
DATE OF OVERVIEW: _____
SCORE: _____

SCORING AND GRADING SYSTEM SUMMARY

Potential Points /100	Scoring System Points	0	125	250	375	500
		Complete Failure	Failure	Below Average	Acceptable	Exceptional
		0%	25%	50%	75%	100%

EXCEPTIONAL: >=425
PASSING: 350 - 425
NEEDS PLAN FOR IMPROVEMENT: 250 - 349
FAILED - NOTIFY EPD: <=250

Qualification and Training 30 points

7

Percentage of all ES&PC Inspectors that are GSWCC Level 1B Certified

- 100% = 30 pts
- 75-99% = 24 pts
- 50-74% = 18 pts
- 25-49% = 12 pts
- <25% = 6 pts

Example:
8 of 11 inspectors are 1B Certified
 $8/11 = 73\%$
18 points

Complaint Resolution 30 points

8

Promptness of response

- < 8 hrs = 15 pts
- 8-12 hrs = 12 pts
- 12-24 hrs = 9 pts
- 24-48 hrs = 6 pts
- > 48 hrs = 3 pts

Promptness of complaint resolution

- < 24 hrs = 15 pts
- 2-5 days = 12 pts
- 5-10 days = 9 pts
- > 10 days = 6 pts

Inspection Frequency and Level of Enforcement 60 points

9

Ratio of sites to inspector

- <20 = 15 pts
- 20-30 = 12 pts
- 30-40 = 9 pts
- > 40 = 6 pts

Ratio of disturbed acreage to inspector

- <20 = 15 pts
- 20-30 = 12 pts
- 30-40 = 9 pts
- > 40 = 6 pts

Frequency of each site inspection (At least once a week and after every rainfall event = 30 pts)

Reporting

50 points

10

- Semi-annual reports submitted to GSWCC on schedule (25 pts)
- Monthly performance reports submitted to the District at the regularly scheduled meetings during the last twelve months (25 pts)

Potential Points	Performance Measure	Points Scored
30	Program Administration and Record Keeping	25
18	Availability and Quality of Logs (Permits, Complaints, Inspections and Enforcement)	4
6	Issuing Authority does not issue permit until all variances, permits and approvals, including NOI, are obtained	6
4	Issuing Authority notifies permittee of Local Ordinances	4
4	ES&PC Ordinance is current with state minimum requirements	4
30	Qualification and Training	
30	Percentage of all ES&PC Inspectors that are GSWCC Level 1B Certified	30
30	Complaint Resolution	
15	Promptness of Response	15
15	Promptness of Complaint Resolution	15
30	Inspection Frequency and Level of Enforcement	
15	Ratio of sites to inspector	15
15	Ratio of disturbed acreage to inspector	15
30	Frequency of each site inspection (At least once a week and after every rainfall event > .30)	30
30	Reporting	
25	Semi-annual reports submitted to GSWCC on schedule	25
25	Monthly performance reports submitted to the District at the regularly scheduled meetings during the last twelve months	25
ADMINISTRATIVE TOTAL POINTS = 111		

12

Site Conditions

300 points

Site is permitted with permit properly displayed on site 40 pts

13

- Valid permit is displayed on site (40 pts)
- No valid permit (0 pts)

Approved set of stamped plans on site 40 pts

14

- Approved set of stamped plans on site (40 pts)
- Plans not on site upon arrival, but contractor brings approved plans to site in a timely manner (40 pts)
- Plans on site – but not approved (0 pts)
- No approved stamped plans (0 pts)

Project site matches the approved plans 30 pts

15

- Site 100% matches the plan (30 pts)
- Site somewhat matches the plan (range between 0-30 pts)
- Plan no where close - am I looking at the right plan? (0 pts)

Proper installation of BMP's 10 pts

16

- Count up all the BMP's installed in the field and divide by number installed correctly.
 - Example
 - 13 BMP's were found in the field during the overview
 - 8 were installed correctly.

This would mean 62 % of the BMP's were installed per the details, so this site would be awarded 6 points.

Proper maintenance of BMP's 10 pts

17

- Again, count up all the BMP's you saw, same number as last section and divide by the number that do not need maintenance.
- Example
 - 13 BMP's installed, 3 do not need maintenance; therefore 23% of site has been properly maintained. This site would receive 2 pts for this section.

State waters buffer encroachment without proper variance 40 pts

18

- No buffer encroachment, or buffer encroachment with proper variance or exemption (40 pts)
- Buffer encroachment with enforcement actions taken (20 pts)
- Buffer encroachment no actions taken as of day of overview (0 pts)

Amount of erosion on site 10 pts

19

- Easiest to think about in smaller areas
- Break it down by the drainage basins for the specific phase and give average of that area that does not have erosion problems.
- Example
 - ▣ drainage basin A is about 80 % fine
 - ▣ drainage basin B is about 90 % fine
 - ▣ drainage basin C has not started yet and is 100%

Amount of sediment leaving site 40 pts

20

- Is sediment leaving site?
- Where to?
- How much?

Site is in compliance with State General Permit 40 pts

21

- Is the site in compliance with the appropriate permit? Example: Advanced Auto Parts – Stand Alone
- Is the proper documentation on site?
 - i.e. Inspection records, NOI's, site compliance, BMP compliance, Citations, Statewaters, Initial BMP letter within 7 days of completion, waste disposal and sanitary sewer, or septic tank regs. etc..

Required enforcement
action taken

40 pts

22

- When violations are found, is the LIA taking the appropriate actions? Written warnings, stop work orders, fines?
 - Example: Site has buffer encroachment
 - Is this the first time LIA has seen it?
 - Has there been a stop work order posted?
 - Has remediation taken place?

SITE 1

Permit and Approved Plans on Site

24



- Permit on site ✓
- Approved set of stamped plans on site ✓
- Inspection records
- 7-day letter signed

Observations

25

- Concrete washout area noted on plan was missing from site – evidence of washout occurring around site



Observations

26

- Maintenance of silt fence needed - not maintaining 80% of height & clean-out at half-full



Observations

27

- Rills indicate a need for temporary stabilization



Observations

28

- Construction exit should be refreshed



Observations

29

- Appearance of sediment leaving site (enforcement action taken by LIA prior to site visit)



What is your score for this site?

30

MS	Site Condition	Site 1
40	Site is permitted with permit properly displayed on site	40
40	Approved set of stamped plans on site	40
30	Project site matches the approved plans	28
10	Proper installation of BMP's	9
10	Proper maintenance of BMP's	7
40	State waters buffer encroachment without proper variance	40
10	Amount of erosion on site	8
40	Amount of sediment leaving site	35
40	Site is in compliance with State General Permit	40
40	Required enforcement action taken	40

Total = 287

SITE 2

Permit and Approved Plans on Site

32



- Permit on site **X**
- Approved set of stamped plans on site **✓**
- Inspection records
- 7-day letter signed

Observations

33

- RECP installed incorrectly



Observations

34

- This Cd-Hb has erosion occurring underneath – needs to be properly installed with splash pad and be maintained
- Missing several Cd-Hb according to ES&PC Plan



Observations

35

- Silt fence not trenched in - not properly installed
- Double row Sd1-S silt fence should be installed along state waters per ES&PC Plan
- Silt fence is encroaching on 25' buffer – needs to follow contour as per ES&PC Plan



What is your score for this site?

36

Item	Site Conditions	Site 2
40	Site is permitted with permit properly displayed on site	0
40	Approved set of stamped plans on site	40
30	Project site matches the approved plans	20
10	Proper installation of BMP's	5
10	Proper maintenance of BMP's	8
40	State waters buffer encroachment without proper variance	20
10	Amount of erosion on site	10
40	Amount of sediment leaving site	40
40	Site is in compliance with State General Permit	20
40	Required enforcement action taken	20

Total = 183

40

Questions?

GSWCC
Urban Program
4310 Lexington Road
Athens, GA 30605
(706) 552-4474