

E&S Pilot Program using SWPPPTrack

Steve Wright, Water Resources Engineer
Ting Guo, E&S Engineer
Nate Zimmerman, E&S Program Manager

LESSONS LEARNED

MARCH 14, 2023



The following agencies have delegation of [Sediment and Stormwater Program](#) elements, consisting of plan review, construction inspection, and maintenance inspection for their geographic boundaries.

State Agencies

Department of Natural Resources & Environmental Control (DNREC)

Division of Watershed Stewardship
Sediment and Stormwater Program
285 Beiser Boulevard, Suite 102
Dover DE 19904
302-739-9921

DNREC is responsible for all aspects of administration of the state sediment and stormwater management program under the Delaware Sediment and Stormwater Law and Regulations. Responsibilities include plan review and inspection of State and Federal Projects.

Department of Transportation (DelDOT)

800 Bay Road
P.O. Box 778
Dover DE 19903
302-760-2251

Delegated Area: DelDOT Construction

New Castle County

New Castle County Dept. of Land Use

Licensing Division
87 Reads Way
Corporate Commons
New Castle DE 19720
302-395-5400

Delegated Area: All unincorporated areas of New Castle County

City of Newark

Public Works Department
220 Elkton Road
Newark DE 19711
302-366-7040
302-366-7045

Delegated Area: City of Newark

City of Wilmington

Department of Public Works
800 North French Street
Wilmington, DE 19801
Phone: (302) 576-3060

Delegated Area: City of Wilmington

Kent County

Kent Conservation District

1670 S. DuPont Highway
Dover, DE 19901
302-608-5370

Delegated Area: Kent County

New Castle Conservation District

2430 Old County Road
Newark DE 19702
302-832-3100 x 3

Delegated Area: All Incorporated areas of New Castle County (except City of Newark, City of Wilmington and Town of Middletown)

Town of Middletown

19 West Green Street
Middletown DE 19709
302-378-9120

Delegated Area: Town of Middletown

Sussex County

Sussex Conservation District

23818 Shortly Rd.
Georgetown DE 19947
302-856-2105
302-856-7219

Delegated Area: Sussex County

Poll 3

► For permit coverage, construction activities with land disturbing activities of _____ or more must submit a Notice of Intent (NOI) prior to plan approval and agree to comply with requirements outlined in the NPDES General Permit for Stormwater Discharges from Construction Activity, also known as the Delaware Construction General Permit or CGP. Permit coverage is required until conditions of terminating permit coverage are met.

A. 1000 sqft

B. 5000 sqft

C. 1 acre

D. 5 acres

For “Normal” Projects

- SWPPP is approved before advertisement
- Weekly E&S inspection and recording keeping are required. For projects that are marked “Major”, a CCR (gold card holder) will be assigned, and he/she will complete the weekly report. For projects that are marked “Minor” but have **disturbance area for more than an acre (NOI is required), a DeIDOT weekly self E&S inspection is required to be completed by a minimum Responsible Personnel (Blue Card holder).**
- Regulatory Inspections are conducted for all Major projects and Minor Projects that have NOIs.

CCR Responsibilities on DeIDOT Projects

- ▶ **For Major Projects**, this position will be assigned by the E&S Engineer with the following responsibilities.
- ▶ Schedule and attend an ES2M Pre-Construction Meeting on site, which is a separate meeting from the Project Construction Pre-Construction meeting, a minimum of 7 days prior to the Notice to Proceed. Review approved ES2M plan with the contractor and the DeIDOT Project Resident. Discuss any proposed plan changes at this time. Document the meeting within 3 days of occurrence and distribute to attendees and other designated DeIDOT personnel.
- ▶ Perform weekly ES2M Inspections and submit reports to the E&S Section.
- ▶ **Perform SWM construction checklist and submit checklist to the E&S Section.**

5101 Sediment and Stormwater Regulations- Stormwater Management BMP Review During construction **CCR Inspection**

- ▶ 6.5.5 All stormwater management systems shall be reviewed during construction with enough frequency to document that the system has been constructed in accordance with the approved Sediment and Stormwater Management Plan, the design specifications, and the appropriate stormwater management system construction checklist. **The Owner shall provide adequate notice to the Department or Delegated Agency and Certified Construction Reviewer**, if applicable, before initiating construction of stormwater management systems. **The Department, Delegated Agency, or Certified Construction Reviewer shall be responsible for conducting and documenting these reviews, as required. Photographic documentation of construction of the stormwater management system is required.**

CCR Responsibilities on DelDOT Projects

- ▶ Provide required inspection of critical components of SWM (Stormwater Management) Facility construction in accordance with DSSR §6.5.5 and complete the SWM Construction Checklist as per DSSR §6.1.5 and §6.3.1.3.
- ▶ **Contractor Responsibility**-Provide the ES2M CCR 48 hour prior notification, in advance of breaking ground on any SWM Facility construction.
- ▶ **3rd party inspection only benefits the contractor and provides a blanket of protection in the case of BMP Failure and is a critical part of Infiltration practices as well as BMP's with any hidden(subgrade) infrastructure.**

SWPPPTrack (CCR, Regulatory and BMP Checklist)

- Desktop dashboard
 - Real-time inspection data
 - Real-time notifications
 - Non-compliance
 - Problem areas
- SWPPP (Sediment & SWM Plan)
- Field inspection reporting application
 - Easy, fast, effective inspection
 - Create & manage tasks
 - Documentation & photos
 - Identify problem areas
 - Access to the most current SWPPP info

E&S Pilot Program

- Special Provision
- E&S Design Guide
- DeIDOT Advertises Plans without E&S design
- Contractor submits bid for SWPPP Development, SWPPP Inspections, Inspection Software, and Fixed Erosion Control Items.
- Awarded Contractor develops SWPPP
- DeIDOT Approves SWPPP
- DeIDOT files the project NOI when applicable
- Contractor is required to file Co-permittee form
- Contractor constructs project within constraints of the contractor designed SWPPP
- Ensure compliance with the Construction General Permit through weekly inspections.

E&S Pilot Projects

T201707104 BR 1-484 on Harvey Straughn Rd over Black Stallion Ditch

- 0.7 acres disturbance, 40-day job
- Contract awarded on 10/5/2020
- Contractor hired Designer submitted the SWPPP on 12/10/2020 and was approved on 12/17/2020
- CCR from Contractor hired Designer approved on 12/21/2020
- CCR held the E&S pre-con on 12/29/2020
- NTP date 6/28/2021
- First Chargeable Day 7/6/2021
- ESL helped Plan revisions
- Initial Inspection 8/10/2021
- 14 CCR inspections and 2 Regulatory Inspections, all in compliance
- VE accepted on 11/15/2021
- Accepted by M&O on 11/30/2021

E&S Pilot Projects

T201807103 Br 1-022 and Br 1-525 on Sharpley Rd

- 0.7, 0.84, and 0.3 acres disturbance, 131-day job
- Contract awarded on 4/12/2021
- Contractor hired Designer submitted the SWPPP on 4/15/21 and was approved on 4/29/21 (same as previous project)
- CCR from Contractor hired Designer approved on 12/21/2020
- CCR held the E&S pre-con on 5/25/21
- NTP date 6/1/2021
- Plan revisions initiated by the Designer
- Initial Inspection 12/13/2021
- 50 CCR inspections and 6 Regulatory Inspections, 25/50 and 3/6 in compliance (4/30 in compliance for a similar “normal” project’s CCR inspection)
- Streambank Erosion problems continued Stonework Project
- Partially Accepted by M&O on 12/1/2022

E&S Pilot Projects

T201853106 Middletown Park and Ride

- 7.5 acres disturbance, 1 BMP (Wet Pond), 138-day job;
- Contract awarded on 8/23/2021
- Contractor hired Designer submitted the SWPPP on 8/30/21 and was approved on 9/7/21 (Designer is one of the CCR firm for our “Normal” projects)
- NOI filed on 9/8/21 and Co-Permittee filed on 9/15/21
- CCR previously approved
- CCR held the E&S pre-con on 9/13/21
- NTP date 9/9/2021
- Plan revisions done by the Designer/ESL
- Initial Inspection 5/4/2022
- 55 CCR inspections and 7 Regulatory Inspections, 7/55 and 3/7 in compliance (12/52 in compliance for a similar “normal” project’s CCR inspection)
- VE accepted on 10/20/2022
- BMP As-Builts received on 10/26/22
- Accepted by M&O on 10/20/2022

Conclusions

- Probably suitable for small sized projects
- CCRs hired by the Contractor might not be trained for DeIDOT projects
- CCRs hired by DeIDOT “normal” projects are well-trained and stable
- Co-Permittee Requirements in 2020 Spec or newer
- SWPPP after contract was awarded might delay the project, especially when the project in the larger scale
- ESLs might not be utilized during the process
- Value Engineering (Steve)

Questions?

