**Our Mission**: To provide leadership in addressing natural resource conservation issues by promoting the sustainable use of those resources to the citizens of Chester County through education and technical assistance.
Municipal Workshop

Chester County Conservation District

Urban Team:

Gaye Lynn Criswell, Urban Team Leader
Jim Demchak, Resource Conservationist
Joe Sofranko, Resource Conservationist
Shana Stephens, Resource Conservationist
Gordon Roscovich, Resource Conservationist

April 7, 2015
Who is the Conservation District?

- What do we do? What don’t we do?
- What do we look for in the field? For Inspections?
- How about complaints?
- Who does the township contact for complaints?
  - Streams and wetlands?
  - Erosion and Sedimentation Control
    Over an acre? Under an Acre?
  - Timber Harvests?
  - Farms?
Who is the Conservation District?

- Delegation Agreement with PADEP
- Title 25 Pa. Chapter 102
- E&S Control and NPDES
- Plan Reviews and Inspections
Who is the Conservation District?

Urban Team
- NPDES permitted sites
- Construction activities
- Non-agricultural complaints

Ag Team
- Agricultural activities
- Agricultural complaints
FIELD WORK
Pre-Construction Meeting → Initial Inspection → Routine Inspections → NOT

Compliant → Non-Compliant
Pre-Construction Meeting

• Permit Holder/Engineering Firm contacts Conservation District to Schedule
• Attendees include: Permit Holder, Excavator, Municipality, CCCD, and Design Engineer
• Permit and stamped plan is **required** to be onsite
• CCCD checklist
  • Outline expectations and procedures
  • Put together point of contact list
  • Address any anticipated changes to the plan or sequence
Initial Inspection

• CCCD should be contacted when E&S controls are installed

• Inspection includes
  • Check self inspection logs, stamped plans, and copy of permit
  • Check proper installation of E&S BMPs per the approved plan
Routine Inspection

- Conducted on a monthly basis or as needed.
- Inspection includes:
  - Check proper installation of E&S BMPs
  - Check for appropriate stabilization
  - Check BMP maintenance
  - Check for proper sequencing of construction
  - Seek voluntary compliance…
Non-Compliant

• Municipal stop-work orders (shouldn’t stop E&S)
• Compliance Notice (CCCD)
• Compliance Order (PADEP)
• Enforcement (PADEP)
Notice of Termination (NOT)

• NOT Request
  • Final Inspection
    • PCSM BMPs
    • E&S BMPs
    • 70% Uniform Permanent Stabilization

• Record Instrument at Courthouse
  • O&M Agreement
  • Engineering Oversight
SITE INSPECTION REPORTING
(Our Form)
EARTH DISTURBANCE INSPECTION REPORT

Project Name__________________________________ Inspection Date______________ Inspection Time__________

Inspection Findings

1. No violations observed at this time. [ ] (N/A)

2. Failure to (check all that apply):
   a. develop a written Erosion and Sediment (E&S) Plan. [ ] (102.4)
   b. have an E&S Plan available on site. [ ] (102.4)
   c. submit an E&S Plan as requested. [ ] (102.4)
   d. implement effective E&S Best Management Practices (BMPs). [ ] (102.4)
   e. maintain effective E&S BMPs. [ ] (102.4)
   f. use Antidegradation Best Available Combination of Technologies (ABACT) BMPs for discharges to High Quality or Exceptional Value Waters. [ ] (102.4)
   g. obtain an NPDES Permit for Stormwater Discharges Associated with Construction Activities. [ ] (102.5)
   h. obtain an E&S Permit. [ ] (102.5)
   i. prepare and implement a PPC Plan. [ ] (102.5)
   j. submit Notice of Termination. [ ] (102.7)
   k. develop written Post Construction Stormwater Management (PCSM) Plan. [ ] (102.8)
   l. have PCSM Plan available on site. [ ] (102.8)
l. have PCSM Plan available on site.

m. submit PCSM Plan as requested.

n. implement effective PCSM BMPs.

o. maintain effective PCSM BMPs.

p. perform reporting and recordkeeping as required.

q. implement riparian buffer or riparian forest buffer.

r. meet regulatory requirements for riparian forest buffer.

s. provide temporary stabilization of the earth disturbance site.

t. provide permanent stabilization of the earth disturbance site.

u. comply with permit conditions.

3. Sediment or other pollutant was discharged into waters of the Commonwealth.

4. Site conditions present a potential for pollution to waters of the Commonwealth.

5. Other (describe): 

6. Other (describe): 

7. Other (describe): 

8. Other (describe): 

9. Other (describe): 

Inspection of this project has revealed site conditions which constitute violations of 25 Pa. Code Chapters 92a and/or 102 and the Clean Streams Law, the act of June 22, 1937, P.L. 1987, 35 P.S. §691.1 et seq.

Additional information regarding these violations can be found on the back of this page.
SITE INSPECTIONS
What do we look for?
Stabilized Access

- Diversion Berm
- Trap / Sump if Necessary
- Well Maintained / Removal Capacity
Rock Construction Entrance

- Geotextile Underlayment
- Size of Stone
Failure to Implement

- Perimeter Controls
- Stabilization Measures
Failure to Implement

- Perimeter Controls
- Stabilization Measures
Compost Filter Sock

- Clean-out Level
- Super Silt Fence Failed
- Four Fixes in Lieu of Rock Filter Outlet
Pumped Water Filter Bags

- One Hose per Bag
- Setup in Vegetated Area
- Good Clamp and Lift Straps
Concrete Washout

-No Non-discharge Concrete Washout
- No Filter Stone or "Spillway"
- Tributary to Sediment Basin Shouldn’t have Protection
- Positive Drainage Should be Maintained to Inlets
- Bypass Should be Avoided
- Inlets Upslope Were Bypassed
- Overloaded Last Inlet
- Eroded Embankment into Swale
- Swales Capacity Diminished
Inlets Upslope Were Bypassed
- Overloaded Last Inlet
- Eroded Embankment into Swale
Geo-Thermal Treatment

- Poly-lined Swale
- Rock Filters
- Flocculants
- Pumped Water Filter Bag
Skimmer Landing Device
- Skimmer Float Caused Orifice to be Above Water and not Dewater Basin
Reverse Q Skimmer

-New E&S Dewatering Device

-Good Baffle Height
IAS Water Quality Skimmer

-New E&S Dewatering Device
Baffles Tied into the Embankment
Modified Basin Discharge

-For Use When Stabile Flowpath is Unavailable
Permanent Orifice Not Sealed
Permanent Orifice Sealed
Temporary Riser Extension Needed?
- Infiltration Basin
- Stone Bed and Amended Soil on Top
- Vegetative Cover not Established
- Basin Not Dewatering in 72 Hours
- Contact Design Engineer
Inadequate Stabilization

- Trap Embankments Lack Stabilization
- Conveyance Lacks Stabilization
Adequate Stabilization

- Trap Embankment Stabilized
- Conveyance Stabilized
Adequate Stabilization

- Good Contact
- Slopes and Conveyances Blanketed
Adequate Stabilization

-No Erosion in Conveyance
-Notable Germination
Not Permanent Stabilization
Permanent Stabilization

• UNIFORM 70% vegetated cover of erosion resistant perennial species
• Impervious Cover
What do we do if someone is going outside the limit of disturbance?
What to do?

Small Area (a few sq ft)
• Stabilize Immediately
• Reinstall LOD stakes/fencing
• If there is a potential for an pollution event additional E&S controls may be needed

Medium Sized Area (<1 acre)
• Stabilize Immediately
• Contact the project engineer to submit new LOD to CCCD for review (minor revision)

Large Area (>1 acre)
• Stabilize Immediately
• Contact the project engineer to submit new LOD to CCCD for review (minor revision)
CONSTRUCTION SEQUENCE

PRE-CONSTRUCTION
1. INSTALL A ROCK CONSTRUCTION ENTRANCE AT STATION 139+50 AS LOCATED ON THE PLAN DRAWINGS.
2. INSTALL ROCK FILTERS AND INLET PROTECTION ON ALL EXISTING INLETS THROUGHOUT THE PROJECT AS SPECIFIED ON THE PLAN.

STAGE 1
3. INSTALL FILTER SOCKS AND PROTECTIVE FENCING AROUND THE WETLAND AREA ON SR 0029 STATION 138+50 RT TO STATION 140+25 RT AS SHOWN ON THE PLANS.
4. PERFORM CLEARING, GRUBBING AND GRAVING ALONG THE EAST SIDE OF SR 0029 FROM STATION 128+00 RT TO STATION 140, ALONG THE NORTH SIDE OF SR 1016 FROM STATION 28+00 RT TO STATION 31+15 RT, ALONG THE EAST SIDE OF SR 1016 FROM STATION 141+50 RT TO STATION 155+50 RT, AND ALONG THE NORTH SIDE OF SR 1003/SR 0029 FROM STATION 510+00 LT TO STATION 526+00 LT, IMMEDIATELY STABILIZE CONSTRUCTION AREA WITH EROSION CONTROL BLANKET OR STABILIZATION BANDING.

13. INSTALL STORM SEWER, INLETS AND MANHOLE ALONG THE EAST SIDE OF SR 0029 FROM STATION 140+00 RT AND ALONG THE NORTH SIDE OF SR 1016 FROM STATION 31+15 RT. IMMEDIATELY AFT CONSTRUCTION OF PROPOSED DRAINAGE, INSTALL INLET PROTECTIVE BOLLARD IN THE PIPE OUTLETTING THE PROPOSED BIO-RETENTION BASIN ON SR 0029 STATION 150+50 AND BLOCK OFF THE END PIPE WITHOUT INSTALLING THE OUTLET STRUCTURE. ONCE THE PROPOSED DRAINAGE SYSTEM IS IN PLACE, REMOVE THE EXISTING INLET ON SR 1016 AT STATION 25+72 RT AND ON SR 0029 AT STATION 132+00 RT AND EXTEND THE EXISTING CROSS PIPES INTO THE PROPOSED INLETS. PLACE A PUMP PIGEON THE EXISTING INLET ON SR 1016 AT STATION 29+88 RT TO THE PROPOSED INLET ON SR 1016 STATION 29+88 RT. REMOVE THE EXISTING INLET INSIDE OF THE EXISTING DRAINAGE SYSTEM RT AND STATION 140+00 RT.

INfiltration Beds Construction Sequencing & Notes:

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCING AND NOTES. FOR SITE-WIDE CONSTRUCTION SEQUENCING, PLEASE REFER TO THE APPROVED SEQUENCE OF CONSTRUCTION.

THE FOLLOWING CRITICAL STAGES MUST BE INSPECTED BY A LICENSED PROFESSIONAL:

1. Excavation of infiltration beds, fabric on bottom and sides. **ELIMINATE FABRIC ON BOTTOM.**
2. Placement of stone, fabric overlap
3. Backfill of infiltration beds
4. Rough and final grading of overall site

A. EXISTING SUBGRADE UNDER THE INFILTRATION BED SHALL NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO THE PLACEMENT OF GEOFABRIC, AND STONE BED.

B. PRIOR TO CONSTRUCTION, INFILTRATION AREAS SHALL BE MARKED OFF IN THE FIELD. THE AREAS SHALL BE DELINEATED WITH CONSTRUCTION FENCING OR TAPE IN SUCH A MANNER AS TO PREVENT THE PARKING OR REPEATED MOVEMENT OF CONSTRUCTION EQUIPMENT ACROSS THE INFILTRATION AREAS.
Someone is working in the stream. Who do I call?
Non-Permitted Sites

- CCCD Received Complaint
- Waterway Encroachment
- Planned on Filling to Top of Bank
- Wetlands Along Stream
Non-Permitted Sites

- DEP 105 said to Pull Fill Back
- CCCD Asked for Controls & Stabilization
There is a site under an acre of disturbance?
No E & S controls.
What should I do?
Non-Permitted Sites

- No E&S Plan
- Special Protection Watershed
- Almost 1 Acre of Earth Disturbance
Non-Permitted Sites

- No E&S Plan
- CCCD sought voluntary compliance
- Township shut down
WHO DO WE CONTACT?

A person is cutting down trees and the neighbors are complaining…

A person cut down one tree in their own yard…
Timber Harvest...
What if they want to use a new BMP?

Proposed E & S BMPs not within the 2012 E &S BMP Manual should be submitted to the DEP for review. Submission for review should be early in the design process. Refer to Chapter 12 in the E & S Manual for recommendations.

What is this ABACT that we hear about?
ABACT

- If during a 2-year/24-hour storm event it is not possible to avoid increasing the rate or volume of runoff from disturbed areas to a special protection watershed (HQ/EV), Antidegradation Best Available Combination of Technologies (ABACT) BMPs must be used to the fullest extent possible.
Construction Entrances

Not ABACT

ABACT
Perimeter Controls

Not ABACT  ABACT
ABACT Embankment Sed Trap

-Compost Anchored to Face of Spillway
ABACT Rock Filter

- Compost Anchored to Face of Rock Filter
ABACT Rock Filter

- Compost Anchored to Face of Rock Filter
COMPOST SOCK SEDIMENT TRAP
COMPOST FILTER BERM
COMPOST SOCK
CONCRETE WASHOUT
SEDIMENT BASIN FOREBAY AND TURBIDITY BARRIER
Spot the Violations

- **Failure to implement ECB**
- **Failure to stabilize**
- **Failure to implement silt fence**
After Compliance Notice
Spot the Violations

**FAILURE TO INSTALL FILTER MEDIA**
Spot the Violations

Curb opening should be protected.
Spot the Violations

- Failure to Maintain Riprap Apron
- Failure to Implement ECB
- Failure to Implement Clean-Out Stake
Other Issues...
Questions?