



**CapCOG MS4 Training  
MS4 Audits – Made Simple 4 U  
December 3, 2014**





  
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**Today's Panelists**



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- ▶ Robert Ihlein  
Lemoyne Borough Manager
- ▶ Barry Smith  
Manor Township Manager

  
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## MS4 – Common Acronyms



- ▶ MS4 – Municipal Separate Storm Sewer System
- ▶ NPDES – National Pollutant Discharge Elimination System
- ▶ MCM's – Minimum Control Measures
- ▶ SWMP – Stormwater Management Program
- ▶ PCSM – Post Construction Stormwater Management
- ▶ MEP – Maximum Extent Practicable
- ▶ TMDL's – Total Maximum Daily Load
- ▶ BMP's – Best Management Practices





## DEP MS4 Inspection



PA DEP



...so, DEP Southcentral Region (Mike Hickman) called/emailed and said DEP is coming for an MS4 inspection.






## DEP MS4 Inspection




List of items that DEP requests to have on site, separated and stacked on a table, in order to expedite the inspection process (list provided by Mike Hickman, DEP).

- A copy of all past Annual Reports
- A copy of the original and renewal NOI
- A copy of the original and renewal permits
- The Public Education and Outreach Program (PEOP) (written plan)
- The Public Involvement and Participation Program (PIPP) (written plan)
- The Illicit Discharge Detection and Elimination (IDD&E) Program (written plan)
- The inventory of municipal facilities and activities that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4
- The written Operation & Maintenance Plan for municipal facilities and activities
- The written employee training program
- A map of all outfalls, receiving waters, stormwater collection systems, swales, basins, etc.
- Ordinance prohibiting non-stormwater discharges
- The stormwater management ordinance
- The Inventory all PCSM BMPs installed since March 10, 2003 that discharge directly or indirectly to your regulated small MS4.
- The Memorandum of Understanding between the permittee and the County Conservation District.







## DEP MS4 Inspection




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- A copy of all past Annual Reports
- A copy of the original and renewal NOI
- A copy of the original and renewal permits
- The Public Education and Outreach Program (PEOP) (**written** plan)
- The Public Involvement and Participation Program (PIPP) (**written** plan)
- The Illicit Discharge Detection and Elimination (IDD&E) Program (**written** plan)
- The **INVENTORY** of municipal facilities and activities that are owned or operated by the permittee and have the potential for generating stormwater runoff to the regulated small MS4
- The **written** Operation & Maintenance Plan for municipal facilities and activities
- The **written** employee training program
- A map of all outfalls, receiving waters, stormwater collection systems, swales, basins, etc.
- Ordinance prohibiting non-stormwater discharges
- The stormwater management ordinance
- The **INVENTORY** all PCSM BMPs installed since March 10, 2003 that discharge directly or indirectly to your regulated small MS4.
- The Memorandum of Understanding between the permittee and the County Conservation District.











## DEP MS4 Inspection







### PCSWM - Post Construction Stormwater Management Inspection

| FIELD INSPECTION – BMPs |  |
|-------------------------|--|
| BMP Description:        | <input type="checkbox"/> Structural BMP <input type="checkbox"/> Non-Structural BMP<br>BMP Reported In:<br><input type="checkbox"/> Annual/Progress Report <input type="checkbox"/> Other ( _____ )  |
| Locational Description: | Structural BMPs Only:<br>Latitude:   °   '   "<br>Longitude:   °   '   "<br>Property: <input type="checkbox"/> Public <input type="checkbox"/> Private<br>Is BMP Implemented or Being Implemented? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Who Is Responsible for O&M (Structural BMPs Only)?<br><input type="checkbox"/> Municipality <input type="checkbox"/> Other (Name: _____ ) |
| Comments/Deficiencies:  | Date Installed (Structural BMPs Only):<br>Is BMP Located in Urbanized Area? <input type="checkbox"/> Yes <input type="checkbox"/> No   |



  

|                         |  |
|-------------------------|--|
| BMP Description:        | <input type="checkbox"/> Structural BMP <input type="checkbox"/> Non-Structural BMP<br>BMP Reported In:<br><input type="checkbox"/> Annual/Progress Report <input type="checkbox"/> Other ( _____ )  |
| Locational Description: | Structural BMPs Only:<br>Latitude:   °   '   "<br>Longitude:   °   '   "<br>Property: <input type="checkbox"/> Public <input type="checkbox"/> Private<br>Is BMP Implemented or Being Implemented? <input type="checkbox"/> Yes <input type="checkbox"/> No<br>Who Is Responsible for O&M (Structural BMPs Only)?<br><input type="checkbox"/> Municipality <input type="checkbox"/> Other (Name: _____ ) |
| Comments/Deficiencies:  | Date Installed (Structural BMPs Only):<br>Is BMP Located in Urbanized Area? <input type="checkbox"/> Yes <input type="checkbox"/> No   |



## DEP Inspection






### Illicit Discharge & Outfalls

- Looking for maps, field inspection reports.
- Will visit a couple sites that might be questionable.
  - use this opportunity to talk about what DEP wants.
- Records of illicit discharge and follow through.
  - Process for taking a call through follow-up to disposal of clean up.
  - ...not likely that you did not have any illicit discharges.

### Municipal Facilities

- Inspect Facilities to see how maintained and operated (oil/fuel, sweepings, salt, stone/sand covered, trash, vehicle washing and drainage)
- Documentation showing inlets, drainage swales and facilities inspected and maintained.
  - Street sweeping and other logs




## DEP MS4 Inspection

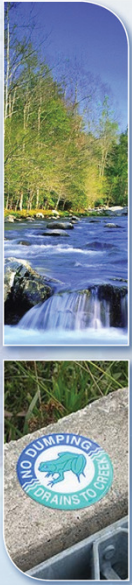


- ▶ **Inspection at Lemoyne Borough**
  - First MS4 Inspection done by DEP in Southcentral Region
- ▶ **Who, what, where, when...**
- ▶ **Overall experience**
  - What we learned
  - What we liked
  - What we were concerned about
- ▶ **Strategies**
  - Records
  - Fire, Police, Staff and Public Works






## EPA Inspection





**EPA Region 3 (Mid-Atlantic)**  
Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia



United States Environmental Protection Agency

...so the EPA called/emailed and said they were coming for an inspection.





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COUNCIL OF GOVERNMENTS**

## EPA Pre-Inspection Conference Call





**MS4 Pre-Inspection Conference Call**  
Time 9:00 AM – 11:00 AM  
**Agenda**

- Inspection Agenda
- Inspection Logistics
- Records Request
- Borough/Township of xx MS4 Program Overview
  - Background Information
    - Year of first permit coverage?
    - Current permit coverage start date?
    - Population served by MS4?
    - Receiving water(s)?
  - Overview of four Minimum Control Measures (MCM):
    - IDD&E
    - Construction Site Stormwater Runoff Control
    - Post-Construction Stormwater Management
    - Pollution Prevention/Good Housekeeping for Municipal Operations
- Number of staff per MCM plus inspectors
- Inventory Tracking Approaches and Systems
  - Storm sewer system and outfalls
  - Illicit discharges
  - Construction sites
  - Post-construction stormwater management facilities
  - Municipal facilities
- Staff training
- MS4 Program Funding
  - Stormwater budget for FY12, FY13, and FY14
  - Stormwater utility fees
- Interaction and Coordination with Neighboring MS4s
- Time permitting: Public Education and Outreach and Public Involvement and Participation Programs
  - Short discussion of a City program and effort – successes/challenges









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## EPA Inspection Agenda






**Tentative Agenda for MS4 Program Inspection**  
Borough / Township, PA

| Day                     | Time                | Team   |   |
|-------------------------|---------------------|--|---|
|                         |                     | Team 1   | Team 2  |
| Thursday,<br>Date, 2014 | 8:00 – 8:30 am      | Opening Discussions (Office)   | Construction Site Stormwater Runoff Control (Office)                                |
|                         | 8:30 – 10:00 am     | Pollution Prevention/Good Housekeeping for Municipal Operations (Office) | Construction Sites (Field)  |
|                         | 10:00 am – 12:00 pm | Municipal Facilities (Field)   | Construction Sites (Field)  |
|                         | 12:00 – 1:00 pm     | Recap and Logistics  | Post-Construction Stormwater Management in New and Re-Developed Activities (Office) |
|                         | 1:00 – 4:00 pm      | Municipal Facilities (Field)   | Post-Construction Stormwater Management (Field)                                     |
| Friday,<br>Date, 2014   | 8:00 – 9:30 am      | Illicit Discharge Detection and Elimination (Office)                     | Post-Construction Stormwater Management (Field)                                     |
|                         | 9:30 am – 12:00 pm  | Illicit Discharge Detection and Elimination (Field)                      | Post-Construction Stormwater Management (Field)                                     |
|                         | 12:00 – 1:00 pm     | EPA Internal Discussions (Tentative time slot)                           |   |
|                         | 1:00 – 3:00 pm      | Closing Discussions (Tentative time slot)                                |   |
|                         | 3:00 – 4:30 pm      |  |   |

Internal Discussions – Discussion among members of the EPA inspection team. Goal is to compare notes and prepare information to be discussed with the borough during Closing Discussions. Borough participation is not required.  
 \*The MS4 is encouraged to write representative from all applicable organizations/divisions/departments.

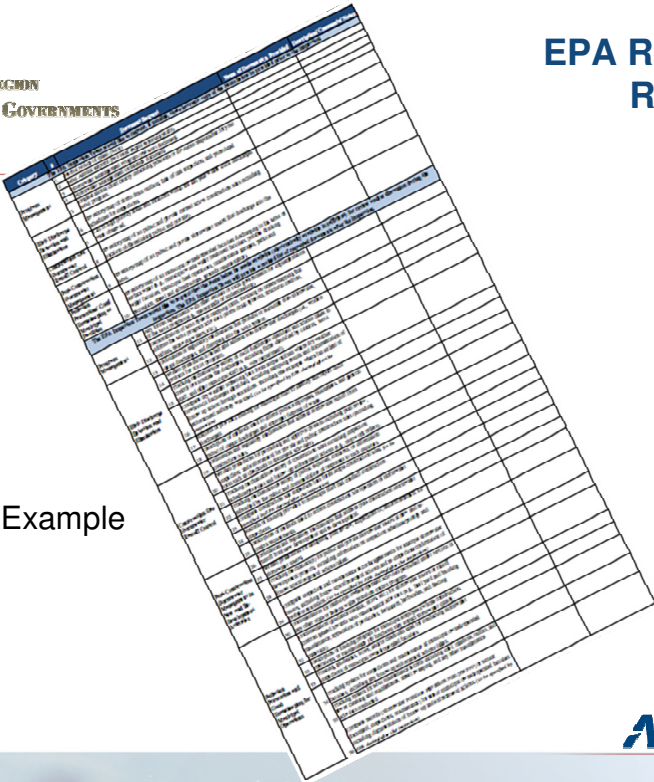




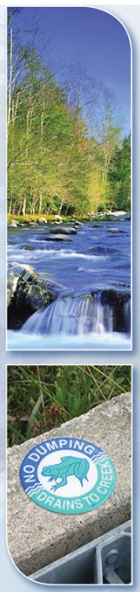



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## EPA Records Request



Example

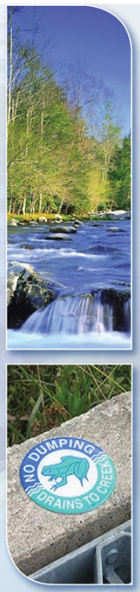







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## EPA Records Request



| Category  | #  | Document Request   | Name of Document(s) Provided | Description/ Comments/ Notes |
|---|----|--|------------------------------|------------------------------|
| <b>The EPA Inspection Team would like to request, if possible, that electronic copy of the items below be provided prior to the inspection.</b>   |    |  |                              |                              |
| <b>Program Management</b>   | 1  | P Permit Notice of Intent (NOI)  |                              |                              |
|   | 2  | MS4 Annual Reports (two most recent reporting years).  |                              |                              |
|   | 3  | Stormwater Management Program (SWMP) document.   |                              |                              |
|   | 4  | Stormwater Management Ordinance document.  |                              |                              |
|   | 5  | Organizational chart clearly indicating positions or divisions responsible for your MS4 program.   |                              |                              |
| <b>Illicit Discharge Detection and Elimination</b>  | 6  | Inventory/map of storm drain outfalls, date of last inspection, and prioritized schedules for inspections.   |                              |                              |
|   | 7  | List of high priority areas and locations within the last year where illicit discharges were observed.   |                              |                              |
| <b>Construction Site Stormwater Runoff Control</b>  | 8  | Inventory/map of all public and private current active construction sites including location (differentiating public and private).   |                              |                              |
| <b>Post-Construction Stormwater Management</b>  | 9  | Inventory/map of all public and private stormwater BMPs that discharge into the MS4.   |                              |                              |
| <b>Pollution Prevention/ Good Housekeeping at Municipal Facilities</b>  | 10 | Inventory/map of all municipal owned/operated facilities discharging to the MS4 or surface water (e.g., municipal waste water treatment facilities, potable drinking water facilities, municipal fleet operations, maintenance garages, parks and recreation, street and infrastructure, grounds maintenance). |                              |                              |
| <b>The EPA Inspection Team would like to request that the items below be made available (electronically available is sufficient) for review and/or discussion during the inspection. The EPA Inspection Team will provide a revised list of requested documents after the inspection.</b> |    |  |                              |                              |
| <b>Program Management</b>   | 11 | Any formal agreements with other entities or local governments for implementation of the MS4 program (e.g., memoranda of understanding).   |                              |                              |
|   | 12 | Demonstration of MS4 system mapping tools, focusing on layers mapping that informs the MS4 program activities (storm drain systems, structural controls, outfalls, receiving waters, etc.).  |                              |                              |
|   | 13 | Ordinances or regulatory mechanisms that prohibit or eliminate non-stormwater, illegal discharges, and dumping into the MS4 system.  |                              |                              |
|   | 14 | Written procedures to detect and address non-stormwater discharges (i.e., written protocol for IDDE program).  |                              |                              |
|   | 15 | Tracking mechanism/inventory of illicit discharges identified and actions taken to control or eliminate the discharges, including those identified by citizens, MS4 staff, and other municipal staff (e.g., Fire Department).  |                              |                              |







## Inspection – what they wanted to see



### Illicit Discharge & Outfalls

- Looking for maps, field inspection reports and priority areas.
- Will visit industrial and residential areas to check, trash, sediment, stains/deposits at the outfall, sediment build-up in inlets, and pollutant sources by inlets.
- Public Works, Office Staff, Police Department and Fire Department understanding of Illicit Discharges and their responsibilities (written)
- Process for taking a call through follow-up to disposal of clean up.
- Records of illicit discharge and follow through.
  - ...not likely that you did not have any illicit discharges.





## Inspection – what they wanted to see



### Municipal Facilities

- Inspect Facilities to see how maintained (oil/fuel, sweepings, salt, stone/sand, trash)
- Good Housekeeping and Vehicle Maintenance Plans

### Road & infrastructure maintenance

- Documentation showing facilities inspected and maintained
- Inlets / Storm Drains
- Swales
- Publicly owned facilities





## Inspection – what they wanted to see



- ▶ **PCSM facilities – public and private**
  - Looking for as-built drawings, inspection records and tracking.
  - Review written procedures for inspections.
  - Watch a couple inspections of their choosing.
- ▶ **Construction sites & documentation**
  - Will review current activities and visit a couple sites.
    - For current projects, demonstrate earth disturbance not occurring before permit issued.
  - Process for permit issuance prior to earth disturbance.
  - Looking for CCD and municipal inspection records
- ▶ **Training & Guidelines for each**
  - Program, IDDE, Maintenance, Construction and Post Construction





## EPA MS4 Inspection



- ▶ **Inspection**
  - Who, what, where, when...
- ▶ **Overall experiences**
  - What we learned
  - What we liked
  - What we were concerned about
- ▶ **Strategies**
  - Get your entire team together for MS4 refresher
  - Try to keep EPA from splitting your team up
  - Make sure Fire Chief & Police Chief are there
  - Makes sure County Conservation District Representative is there for MCM 4 & 5 discussion.



**ARRO**

**QUESTIONS?**



**ARRO**

**Thank you for your time and  
commitment to making our  
communities a better place to live.**



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**ARRO**



LEMoyNE  
The little town that has it all!



MANOR  
TOWNSHIP

