

Pre-Conference Workshop

Introduction for New MS4 Coordinators and Elected Officials

Kentucky Stormwater Association
Annual Conference, June 2016



Chad McCormick, PE, CFM

Jennifer Herrell, PE, CFM



Overall Agenda

- ✓ 1 – Introduction
- ✓ 2 – Program Finance
Planning in Uncertain Times
- 3 – Annual Reports:
Avoiding the Rush
- 4 – Program Audit
Preparedness
(EPA IN KY IN 2020)



Pre-Conference Workshop

3 – Annual Reports: Avoiding the Rush



“ ... eReporting is changing everything – soon, like next year...”

Part 3 - Overview

- “ ... eReporting is changing everything – soon, like next year...”
- You're Alone Only if You CHOOSE
- Prepare to write the report in Small Pieces Routinely
- Write the First Report with the SWQMP
- Annually ADD to the Report
- Be Honest and Forthright with KDOW – EPA about Challenges
- Opportunity to Assess
- Opportunity for Elected Officials



Annual Reports = Self Audits



KSA



Does the Message
Match the Data?

Program Assessment



Correcting Course

- By 2009, we were facing challenges
 - Elected officials wondered why the City received an NOV and why we needed funding for this program and additional staff
 - Community wasn't aware there was such a thing as MS4
 - Push back from Development Community and a “predator with no teeth”

Restoring Elected Official Knowledge

- Hold a workshop when the cameras aren't rolling
- Talk to them one on one
- Find a “champion” or two
- Take them on a tour of your infrastructure
- Develop a business plan
- They won't understand the permit requirements, so remind them of the O&M needs



What Shelbyville is working on now

- Computerized record management
- Continue Mapping Impervious areas
- Stormwater Master Plan
- Water Quality Monitoring Plan
- TMDL???
- Funding Source – User fee / Utility - ???

KDOW Review – August 21, 2017

- August 21, 2017
- ~3hr Interviews and Inspections
- No Enforcement Actions nor Major Deficiencies
- Some Areas to Improve
 - No Surprises
 - Already Working On Them
 - Mayor and City Council Already Aware
- **ADVICE – BE HONEST AND UPFRONT**

KDOW Coordination = Trust

Annual Reports

- Compliance is NOT Evaluated by the Weight of the Report
- Avoid the Paperwork Avalanche for “LIP”
- Be Thorough, but Concise
- Highlight Problems
 - Control the Discussion
 - Show Competence



KDOW Coordination = Trust

Annual Reports

- Compliance is NOT Evaluated by the Weight of the Report
- Avoid the Paperwork Avalanche for “LIP”
- Be Thorough, but Concise
- Highlight Problems
 - Control the Discussion
 - Show Competence
- First Chance to Assert Compliance



Annual Permit Compliance Report

elected official signs

Kentucky Division of Water

GENERAL PERMIT ANNUAL COMPLIANCE REPORT.

Phase II Stormwater MS4
Kentucky Division of Water

NOTE:

- In order to comply with KPDES sMS4 permits, annual reports must be submitted to the Kentucky Division of Water.
- Please type or print in ink.
- Please answer all questions thoroughly and return the form by the due date.
- Return this form and any required addenda to the KDOW MS4 Coordinator at the address listed in the box on the upper-right.
- For 2010 Annual Report only, report is due by March 1, 2011.

For questions regarding this form, contact:

Abigail Rains
ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water
200 Fair Oaks Lane, 4th Floor
Frankfort, KY 40601
Phone: (502) 564-8158, Extension 4891
Web Access: <http://water.ky.gov>

REPORTING YEAR
(Check one)

- 2008
 2009
 2010
 2011
 2012

PART A: GENERAL INFORMATION – MS4 OPERATOR

1. Report Completed By: _____
(MS4 Operator—i.e., name of permit holder)

2. Permit Number: **K Y C 2** | | | | | | | |

3. Mailing Address
Street Address: _____

City County Of: _____ Zip: _____ County: _____
 Other

PART B: GENERAL INFORMATION – CONTACT PERSON

4. Contact Person Name (please print): _____

5. Contact Person Title: _____

6. Phone Number: _____

7. Facsimile Number (if applicable): _____

8. E-mail Address (if applicable): _____



Elected Official Certification Signature

PART E: CERTIFICATION AND SIGNATURE

- ▶ The individual completing this report, listed in "PART A: GENERAL INFORMATION – MS4 OPERATOR" must sign the following certification statement:

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

Type or Print Name: _____

Signature: _____

Date: _____



Annual Reporting

Current

- PDF of a Hard Copy
- Tell Your Story
- Pick Your Format
- Goes to KDOW (Abby Rains)
- EPA Asks When They Want It
- Public Can Ask For Copy

As Soon As Next Year

- EPA Directed Format
- All Online
- KDOW Sees at Same Time as EPA
- Increase Public Access



Checklists: SWQMP

- Commitments You Made
- Generically Written Leaves Open to Interpretations
 - Specific Goals
 - Measurable
 - Easily Documented
 - Specific Timelines



Checklists: MS4 Permit

- **KDOW View:**
 - Your Approved SWQMP will Satisfy the MS4 Permit
- **EPA & Others' View**
 - Don't have to Have Same Perspective as KDOW

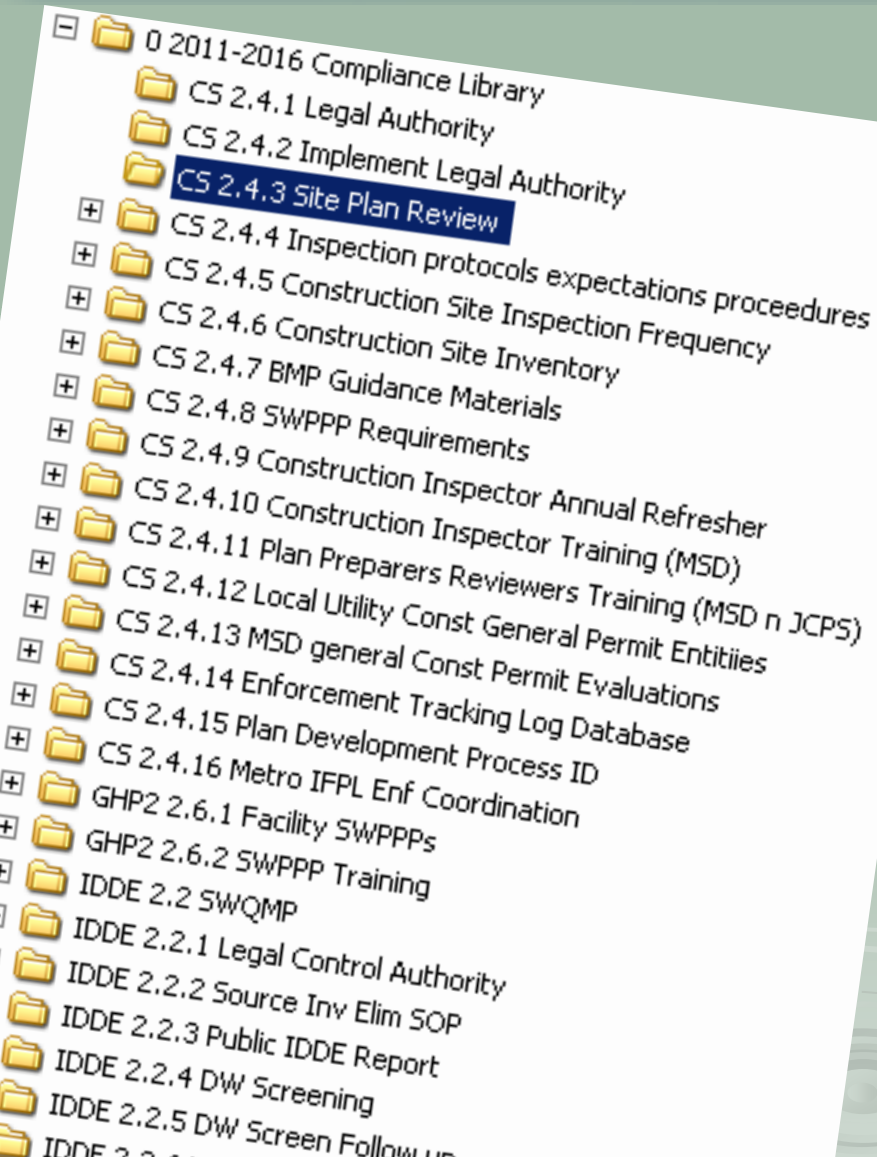


Checklists: KDOW Checklist

- Focused: Important to Abby
- Review of Regulatory Authority
- The Reality of Being Able to Implement A Viable Program
- A Short-Version of EPA's Checklist
- Test Against Annual Report
- Usually Doesn't Involve Field Verification



Prepare the Documentation Organization



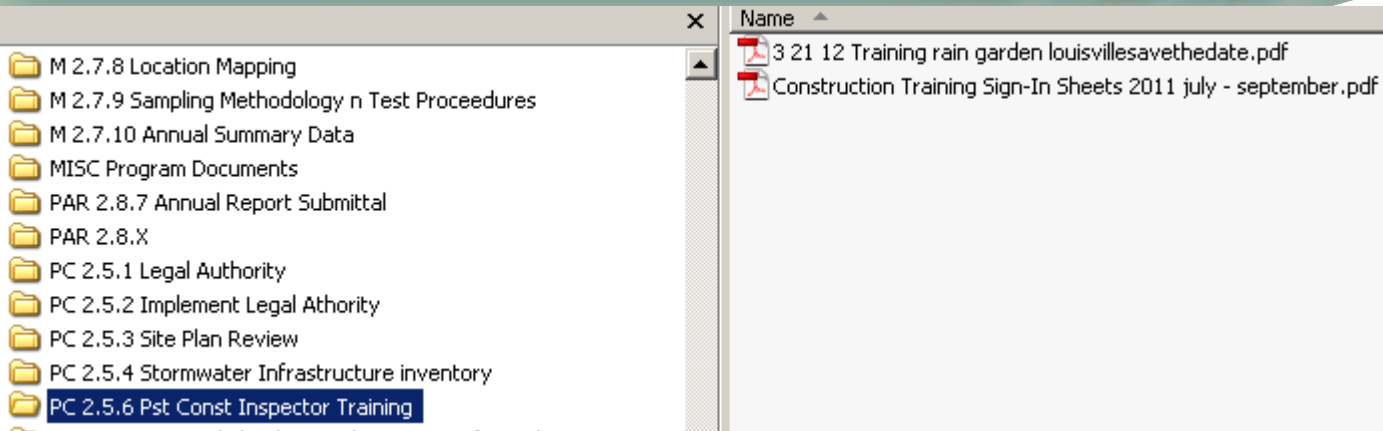
- Ways to Organize:
 - Electronic Cabinets
 - Paper Files & Folders
 - Confirmation Emails
- Make it easy to Find
- Match to Permit / SWQMP
- Number Tasks

Compliance Library

- Stormwater
 - 1 MS4 PERMIT KYS000001 COMPLIANCE
 - + 0 2011-2016 Compliance Library
 - + 0 Stormwater Program components
 - + 1 Permits
 - + 2 SWQMP DOCUMENTS
 - + 3 Annual Reports
 - + 4 Codes Ordinances & Standards
 - + 5 KDOW Audit
 - + 6 CIP Planning N MGT
 - + 2 BMPs Green Infrastruc & LID
 - 3 Regulations and Guidance
 - + Court Cases
 - + Endangered Species Act ESA
 - + EPA COMPLIANCE GUIDE 2007
 - + EPA Materials
 - + Kentucky

- Final Products
- PDFs
- PPTs
- Logs and Notes
- Not Working Files
- For Full Permit Term

Documentation



Save the date!
Water Management and Planning Professionals

March 21, 2012
 At the Girl Scouts of Kentuckiana
 2115 Lexington Road
 Louisville KY



Successful wetland restoration is an important skill due to the increased use of constructed wetlands for mitigation, habitat restoration, and wastewater treatment. Implementing the applicable regulations is an important first step. Monitoring and eliminating invasive species is another important step. Successful restoration. Highly trained professionals will guide you to bring a wetland back to its natural state.

- Agenda**
- 9:00 AM Welcome
 - 9:05-9:50 AM - Site Evaluation
Osburn, Principal, Rundell Ernsth
 - 9:50-10:45 AM - Proper Design
Urban Rain Gardens and Bio-Retention
Storm Water Quality Program,
Landscape Restoration Specialist
 - 11:00 AM - Break
 - 11:15 AM - Native Plant
Kevin Tung
Landscape Nurse
 - 12:45 PM - Lunch
 - 1:30 PM - M. Johnson, Senior E

MSD Louisville and Jefferson County Metropolitan Sewer District

Subject/Course Title: MS4 Requirements for Construction & Post-Construction

Instructor(s): C. McLaughlin

TRAINING LOG

By signing this training log, I acknowledge that I understand the content presented during this training session.

Personnel Attending:

Printed Name	Employee No.	Signature
1. <u>DAVID JOHNSON</u>	<u>23950</u>	<u>[Signature]</u>
2. <u>BOB STAUBLE</u>	<u>23903</u>	<u>[Signature]</u>
3. <u>Carolyn Fust</u>	<u>100044</u>	<u>[Signature]</u>
4. <u>Lori Rafferty</u>	<u>100199</u>	<u>[Signature]</u>
5. <u>DAT BARRY</u>	<u>23403</u>	<u>[Signature]</u>
6. <u>Tony Stake</u>	<u>23047</u>	<u>[Signature]</u>

MSD Course Number: _____

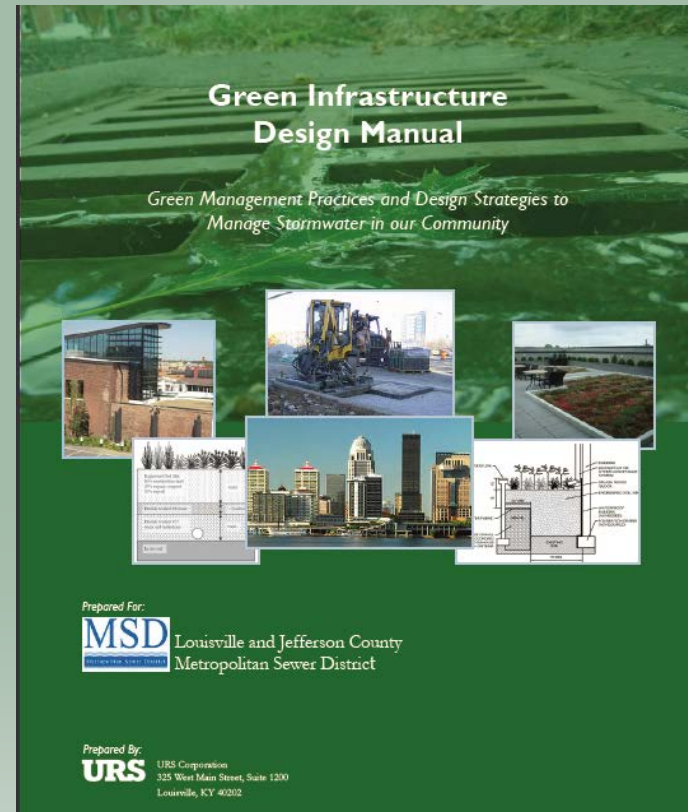
Date: 7/11/11 **Time:** 9am

Location: 66 Training Room

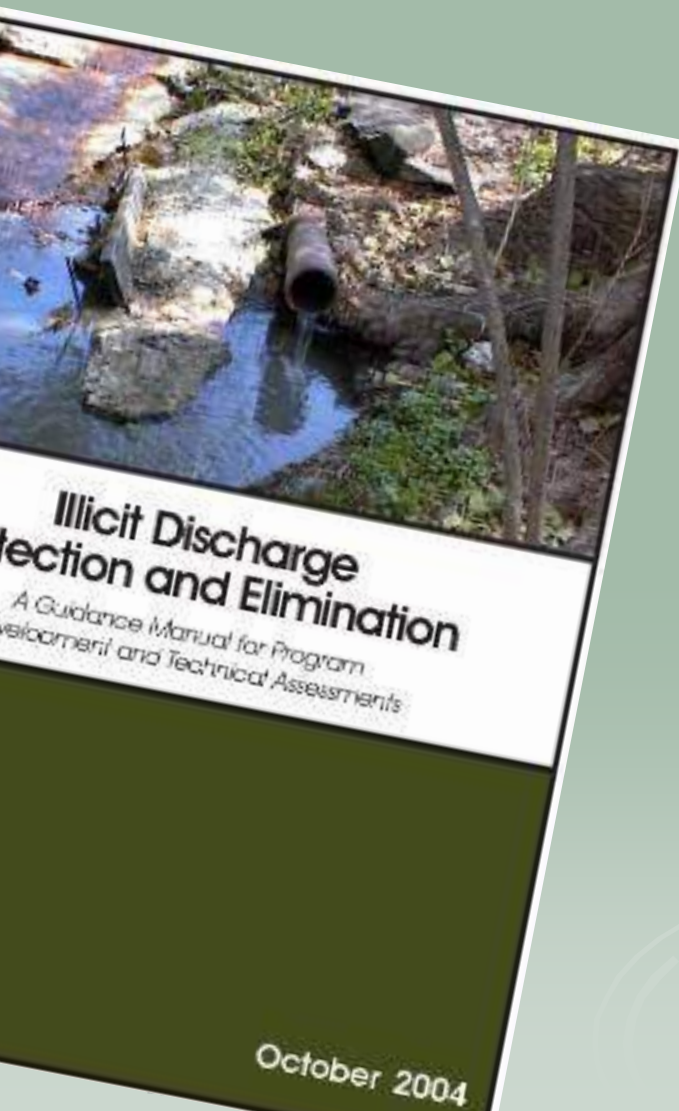
Supervisor: M. JOHNSON
D. JOHNSON

Behind the PC-Ordinance: Guidance Materials & Standards

- Put Developers on Fair Ground
- Protect Staff from “Judgment Calls”
- Protect Elected Officials from Unanswered Political Pressure



Important Documents



- MOUs, SOPs
- IDDE, EPSC & GMP Manuals
- Ordinances, resolutions, codes, and other legal authority
- Construction site project files
- Databases
- Meeting Sign Up Sheets / Training Logs

Final Thoughts

The most important thing to keep in mind...

- Keep a good working relationship with KY DOW
 - Be Honest
 - Communicate your status regularly and ask for advice
 - Abby is there to help
 - I have found you get credit for “trying”

Thank you

Questions? Call us!

Chad McCormick, PE, CFM

Jennifer Herrell, PE, CFM



Land Design and Development, Inc.
503 Washburn Ave
Louisville, KY 40222
(502) 426-9374
(502) 724-9356 Cell
mccormick@ldd-inc.com



City of Shelbyville
Public Works Department
787 Kentucky Street
Shelbyville, KY 40065
(502) 633-1094
(502) 633-5481 fax
jpherrell@mw.twcbc.com

Pre-Conference Workshop

Introduction for New MS4 Coordinators and Elected Officials

Kentucky Stormwater Association
Annual Conference, June 2016



Chad McCormick, PE, CFM

Jennifer Herrell, PE, CFM



Overall Agenda

- ✓ 1 – Introduction
- ✓ 2 – Program Finance
Planning in Uncertain Times
- ✓ 3 – Annual Reports:
Avoiding the Rush
- 4 – Program Audit
Preparedness
(EPA IN KY IN 2020)



Pre-Conference Workshop

4 – Program Audit Preparedness



(EPA IN KY IN 2020)

Purpose

Get you out of an Audit or
Program Review

Keep a deficiency from
showing up in an Audit



Purpose

Help you know what to expect

Offer approaches to prepare

Introduce you to people and resources



Ways to Look at an MS4 Audit?

- ... my ticket to a lost election / job
- ... “enviro nuts” taking over the world
- ... a witch hunt
- ... an unfunded mandate to be justified
- ... a way to justify more staff
- ... an unlikely event
- ... something for consultant to do for me



Other Ways to Look at a Review / Audit

- I'll be Prepared Whenever it Happens
- Preparation will Require Some Thought, Communication, Cooperation and Effort
- Preparation will Require Good Daily Habits
- Can Confirm Your Doing a Nice Job
- An Opportunity to Learn and Grow



First Things First

- Understand Context
- What are Priorities
- Identify Strengths and Vulnerabilities
- Who has been Reviewed in Last 2-Years?
- Who has been Audited?
- *EPA in KY in 2020*



KDOW MS4 Review History

- 20% of Communities Each Year
 - At Least One Phase I Permit Holder
 - Several Phase II Permit Holders
- Nearly All Receive Improvement Suggestions
- 10-30% Get Some Sort of Enforcement Warning
- Some Show a Good Job
- Some Put on Show of a Good Job



Part 4 - Objectives

- Identify Trust Building Opportunities
- EPA Audit Versus KDOW Review
- Know the Questions
- Know the Boundaries
- Prepare Involved Parties
- Prepare the Documentation
- Self Audits
- Louisville MSD Case Study
- Louisville Program Changes



Self Audits



KSA



Does the Message
Match the Data?

Self Audit Benefits



- Assess compliance of a stormwater program
- Determine if additional resources are needed
 - Staff
 - Funding



Self Audit/Assessment – Other Good Reasons

- **Remove Surprises**
(Protect Your Elected Officials)
- **Budget Pressures**
 - 3rd Party Highlight Needs
 - Highlight Needs vs Wants
- **Coordinating or Team Efforts**
 - Justify For or Against
 - Identify Gaps Others Can Help Cover



Self Audit Basics

- Review Program: SWQMP-Annual Report
- Compile Paperwork
- Use EPA's guide and/or Abby's
- Conduct the "Audit", Interviews, forms
- Summarize Results (2 Pages)
- Write **DRAFT** Report and Distribute
 - Mayor/Judge Executive
 - Finance Director



Why DRAFT Audit Summary

- Public or Working Document
- Simple phrases may be misinterpreted or have unintended consequences
 - Political
 - Economic
 - Compliance
- Avoid Pitfall Terms
- Chance to Prepare Elected Officials
 - Protect Them From Surprises



Pitfall Terms

Pitfall Terms

- All
- Every
- It is
- There was
- “John Doe” violated
- There was an illicit discharge

Alternatives To Consider

- Some, many, most
- A majority
- It appears
- Observations indicate
- There may have been
- There was a confirmed violation at
- There were signs of a potential illicit discharge



Using EPA's Guide in Your Self-Audit

- Chapter 4 – Detailed on-site evaluations
- Review the “common activities” for each program area
- Check out the Resources and Tips
- Read evaluation questions for each program component
- Review “common issues identified during program evaluations”



Audit Timelines

- Self audit can take 1-3 days
 - In-office
 - Field
- Include those that might not know that they are part of the program
 - Schools
 - Fire Department
 - Street Department
 - Solid Waste Department



EPA Audits / KDOW Reviews



KDOW Coordination = Trust

Problem Management

- Known Problems can be Negotiated
- Hidden Problems Lead to Mistrust and Enforcement
- Half-truth is Insulting and Destructive
- Collaboration Guaranteed IF Backed by Real Effort



Compliance Enforcement

➤ Violations

- Warning
- Notice of Violation
- Consent Decree

Sometimes Good
Sometimes Bad

➤ Civil penalties

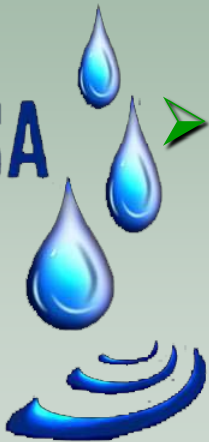
- Fines up to \$32,500 per day
- Each day is a separate violation



➤ Criminal penalties

- Can include imprisonment; e.g., failure to get a permit, falsifying reports, pattern of permit violations

KSA



When EPSC Plans Fail

Who will KDOW enforce upon?



Enforcement Trends

Historically

- Local Developer has site issues
- City doesn't use full extent of local authority
- KDOW Enforcement on Developer

Current KY & Others

- Local Developer has site issues
- City doesn't use full extent of local authority
- KDOW Enforcement on Developer
- KDOW Enforcement on MS4



EPA / KDOW / Public

- Cleaner streams
- Cleaner streets
- Less visible pollution
- One agency/person for response to problems



EPA's Strategy For Audits

➤ EPA 2007 Compliance Monitoring Strategy

- Phase I MS4s – Audits conducted of all Phase I MS4s once every 5 years
- Phase II MS4s – Audits conducted as necessary to determine compliance with strategy by 2014



First Things First ... Summary

- Take a Breadth ...
- Only a Heavy Enforcement if Problems/Challenges are:
 - Hidden
 - Not Discussed
 - Under-exaggerated
- Your Not the First and Won't be the Last
- Accountability is Increasing and Real



EPA Audit Versus KDOW Review



EPA Audit Versus KDOW Review

EPA Audit

- 3-5 Days Min
- Lots of Interviews
- Every Answer Confirmed:
 - Other Interviews
 - Documentation
- No Question is Out of Bounds -Entire Program
- Highest Scrutiny short of Deposition
- Deficiencies not always noted immediately

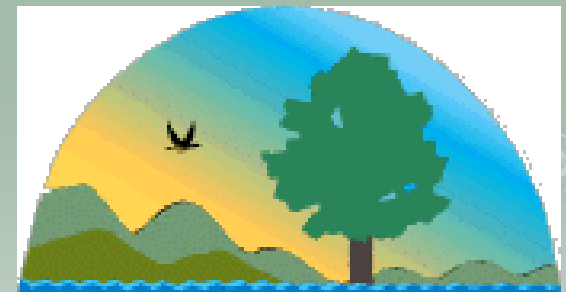
KDOW Review

- 1-2 Days
- Some Interviews
- Customized to KY Programs
- Constructive and Program Building
- Problems immediately noted



Permit Program Administration

- Required by Clean Water Act
- Kentucky Division of Water Issues & Enforces Permits
- EPA Enforces in Every State and U.S. Territories
- **Not An OPTION**



Division of Water



KDOW Coordination = Trust

Problem Management

- Known Problems can be Negotiated
- Hidden Problems Lead to Mistrust and Enforcement
- Half-truth is Insulting and Destructive
- Collaboration Guaranteed IF Backed by Real Effort



Know the Questions



Know the Questions

- Hiden in Open View
- Auditor Specific List
- EPA Standard Checklist
- KDOW Checklist
- MS4 Permit
- SWQMP
- Annual Report



Checklists: Annual Report

- Should be Simple Comparison to Other Lists
- Commitments Made
- Under-commitments Made



Know the Boundaries



Know the Boundaries – Start with SWQMP

- Stormwater Quality Management Plan
- 5-Year Business Plan
- Permit Negotiation Tool
- Compliance Points Defined
 - Who, What, When
 - How (sometimes)



Checklists: EPA “Standard” Checklist

➤ EPA-833-R-07-003

MS4 Program Evaluation Guidance

U.S. Environmental Protection Agency Office of Wastewater Management

Comments on this guide should be directed to:

Jenny Molloy
U.S. EPA Water Permits Division
(202) 564-1939
Molloy.Jennifer@epa.gov

January 2007 – Field test version

EPA-833-R-07-003

CONTENTS

1.	Introduction and Background	2
1.1	Overview	2
1.2	Regulatory Overview	5
1.3	Types of Permittees	7
2.	Pre-Evaluation Preparation	9
2.1	Evaluation Goals and Benefits	9
2.2	Advance Preparation	10
2.3	Materials to Review Before the Evaluation	13
2.4	Annual Report Reviews	15
3.	Conducting a Screening-Level Evaluation	19
3.1	Screening-level procedures	19
3.2	Common screening-level questions	19
3.3	Screening-level evaluation follow-up	22
4.	Conducting a Detailed On-Site Evaluation	23
4.1	Program Management	25
4.2	Public Education and Participation	37
4.3	MS4 Maintenance Activities	43
4.4	Construction Activities	55
4.5	Post-Construction Controls	66
4.6	Industrial Commercial Facilities	76
4.7	Illicit Discharge Detection and Elimination	85
5.	Post-Evaluation Activities	92
5.1	Preparing the Written Report	92
5.2	Follow-Up Activities	97
	Appendix A – Glossary & Acronyms	98
	Appendix B – Program Evaluation Worksheets	103
	Appendix C – Field Inspection Worksheets	163
	Appendix D – Reviewing an Annual Report	171



EPA's Program Evaluation Guide Includes:

- Examples of “what to look for”:
 - Documentation
 - Observations
 - Checklists



Checklists: EPA “Standard” Checklist

➤ Appendix

- A – Glossary & Acronyms
- B – Program Evaluation Worksheets
- C – Field Inspection Worksheets
- D – Reviewing Annual Report

http://www.epa.gov/npdes/pubs/ms4guide_appendicesb-d.pdf



EPA Worksheets Identify

- Major Topics Your Self Audit Should Address
- The Questions an EPA Auditor May Ask
- Documents Should have in MS4 Program
- Use the Worksheets to Identify Improvements
- May or May Not Be Requirements



Checklists: Auditor Specific List

- Focus on that Person's Preferences
- Great Ideas They Want Repeated Elsewhere
- May or May Not be Requirements
- Greatest Opportunity for Free Mentoring



When EPSC Plans Fail

“Show me the Fines and Receipts”



Know the Boundaries

- **SWQMP is Starting Point**
 - What you Think Can be Done
 - How you Proposed to Do it
 - When you Promised it will be Accomplished
- **SWQMP Defines Your MEP**



Know the Boundaries

➤ Permit Sets the Minimum

- In Kentucky: Accepted SWQMPs Rule
- Elsewhere w/ EPA:
 - Even if SWQMP is Inadequate
 - Even if State Doesn't Provide Feedback on Extensions



Interpretations of Maximum Extent Practicable (MEP)

CWA Section 402(p)(3)(B)

Permits for discharge from municipal storm sewers shall require controls to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.



Interpretations of Maximum Extent Practicable (MEP)

CWA Section 402(p)(3)(B)

Permit Holders

➤ Permits for discharge from municipal storm sewers shall require controls to the maximum extent practicable,

•including

- management practices,
- control techniques and system, design and engineering methods,
- and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.



Interpretations of Maximum Extent Practicable (MEP)

CWA Section 402(p)(3)(B)

EPA & 3rd Parties

Permits for discharge from municipal storm sewers shall require controls to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods,

and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.

Must or May ?



Prepare Involved Parties



Prepare Involved Parties



- Primary Contact: MS4 Coordinator
- Inspectors
- Plan Reviewers
- Legal
- Finance
- Elected Officials / Chief Executive
- Consultants / Vendors

Prepare the Involved Parties

- Realize they are Involved
- Familiar with Their Role(s)
- What to Expect:
 - When Interviewed
 - Questions to Be Asked
 - Time Commitment



Prepare the Documentation

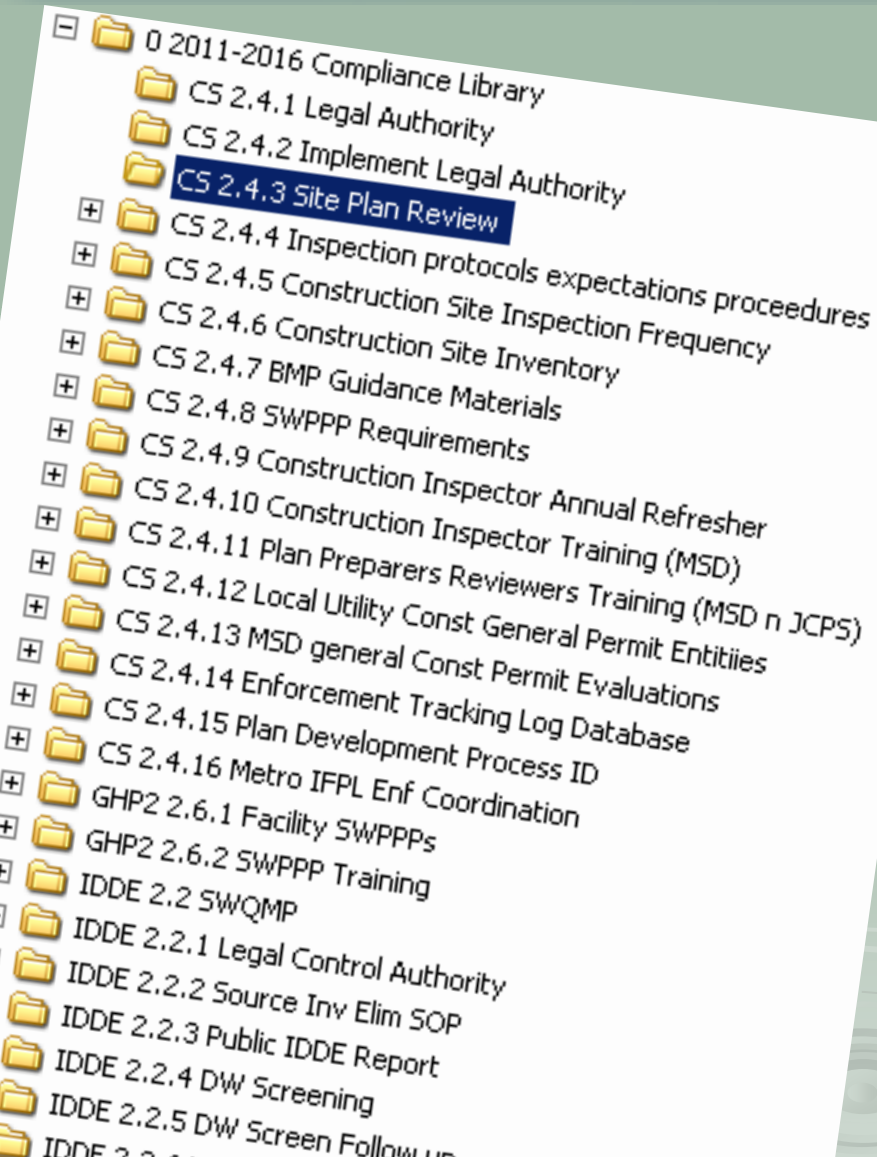


Prepare the Documentation Confirming Trust

- If it is Not Documented “it Didn’t Happen”
- Perception Becomes Reality
- Misperception Becomes Reality
- “If You Can’t Document, then:
 - “It Must be a Lie”
 - “Your Covering Things Up”

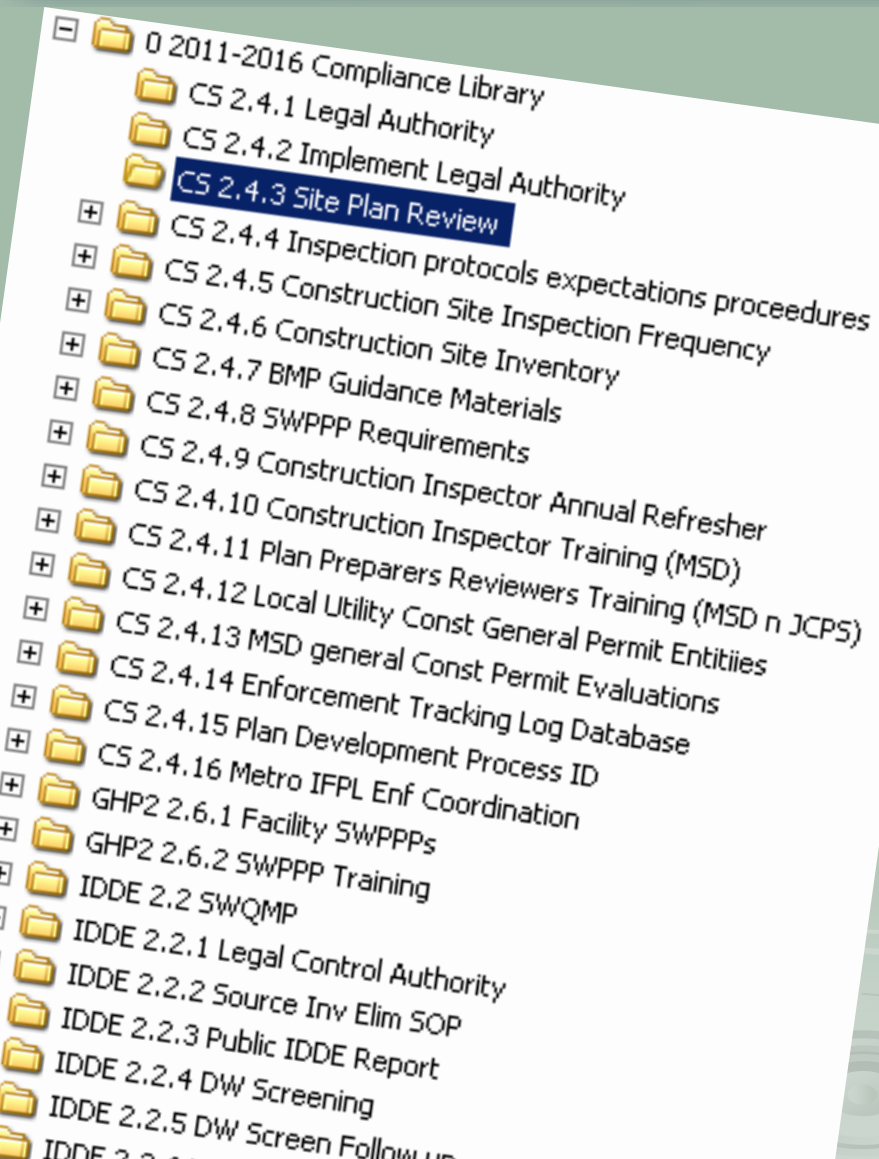


Prepare the Documentation Organization



- Ways to Organize:
 - Electronic Cabinets
 - Paper Files & Folders
 - Confirmation Emails
- Make it easy to Find
- Match to Permit / SWQMP
- Number Tasks

Another Motive for Documentation Organization



- Quick Replies Build Trust
- Delayed Responses Give Time To Speculate Non-Compliance

Important Documents

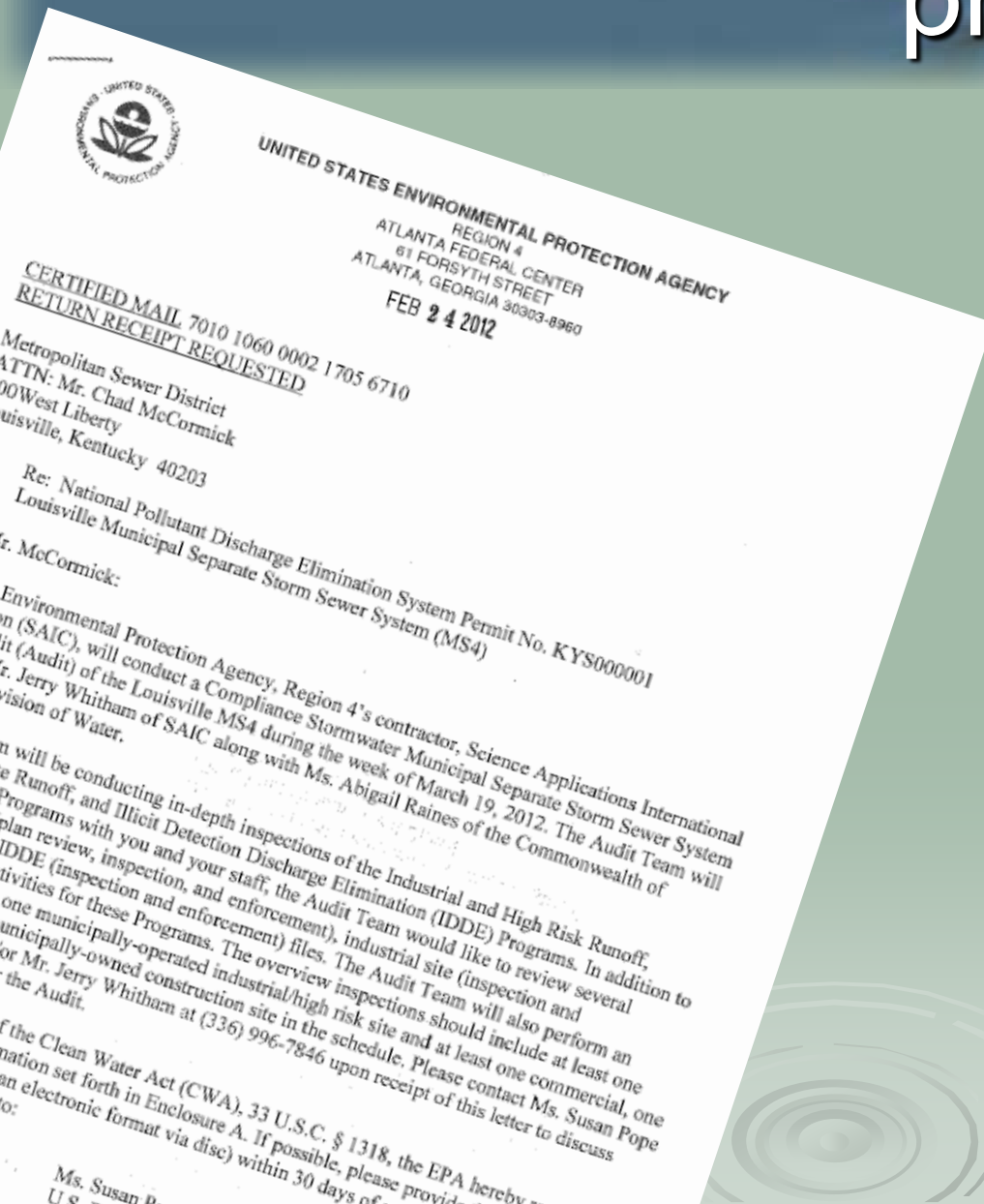
- Outreach Materials & Brochures
- Fact Sheets
- Posters
- Newspaper Articles
- Presentations & Agendas
- Public notices
- Drainage & Outfall map
- Facility SWPPPs



Louisville MSD Case Study



Hello, You're on speaker phone...



- December 2011
- January 2012
- February 2012
- EPA is planning a “Compliance Audit” ...
- Please send the following... within 30 days

Planning the Audit

- Just Received Scathing State Audit – Accounting and Fiduciary
- KDOW Encouraged 1-Month Delay
- Hosting March Madness
- Inspector Couldn't Find Hotel
- Permit Effective August 2011
 - Still in First Permit Year
 - Not Many Requirements Due Yet



Our Auditors

- Abby Rains, KDOW
- Jerry Whittum, SAIC
 - Contract Inspector
 - Very Experienced
 - Straight Forward and Fair
- A Lot of Time to Overthink
 - Can We Get a Fair Inspection from a Contractor?
 - Will MSD-SAIC History Come Into Play?
 - “Great!! Another Glowing Audit”



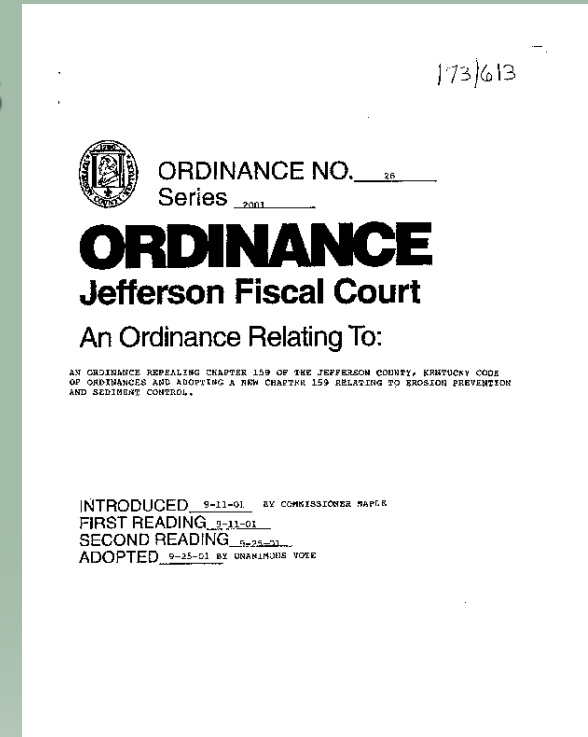
Pre- and Post- Questioning

- Sites Visits NOT a Start Nor End
- Case Study: EPA Audit of Louisville
 - Call in December
 - Letter February 2012 w/ Data Request
 - Multiple email and Phone Requests
 - Interviews March 2012
 - Through December 2012 Multiple email and Phone Requests
 - Official Response April 2013



Before the Visit

- Provide
 - Interlocal Agreements
 - Ordinances
- Stated Focus
 - Industrial
 - IDDE
 - Construction
- Formal Data Requests
- Lots of Calls for More Data
 - Construction & Industrial Inspections



The Week of the Visit

- Interviews and Field Visits from 8:01 am through 6-8:00 pm
- AM: Interviews
- PM: Field Interview
- Late PM: EPA Checklist, SWQMP and his personal list



First Interview

- New Executive Director
- Chief Engineer Director
- Regulatory Director
- Me
- EPA Inspector
 - Introductions
 - Purpose, Plan and Focus



After the Visit

- Six Weeks – Lots of Calls and Emails Requesting Data
 - Copies of Inspection Reports
 - Enforcement Follow-up
- Six Months – A few emails confirming various activities
- After: Silence ... Speculation, Concern, Calm, Panic ... Silence



The Results are in:

- 13-Months Later
- Need New SOPs for Industrial and Construction Inspection and Enforcement
- Renew Interlocal Agreements with Co-Permit Holders
- Full Report had many other suggestions



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
81 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAR 29 2013

CERTIFIED MAIL 7012 1010 0001 8097 4137
RETURN RECEIPT REQUESTED

Metropolitan Sewer District
Attn: Mr. Chad McCormick
700 West Liberty Street
Louisville, Kentucky 40203

Re: Kentucky Pollutant Discharge Elimination System Permit No. KYS000001
Louisville Municipal Separate Storm Sewer System
Compliance Evaluation Inspection
Dear Mr. McCormick:

Enclosed is a copy of the inspection report for the Kentucky Pollutant Discharge Elimination System Permit (KPDES) Municipal Separate Storm Sewer System (MS4) inspection conducted on March 19-22, 2012, by the Science Applications International Corporation, on behalf of the U.S. Environmental Protection Agency, Region 4. Based on the inspection findings, this office requests a response within 30 days of receipt of this letter in regard to specific comments from the inspection report pertaining to:

The Metropolitan Sewer District (MSD) and the co-permittees have not ensured the inter-local agreements (Memorandum of Understanding) have been maintained in effect. The MSD continues to provide illicit discharge detection and elimination (IDDE), industrial stormwater, and construction stormwater inspection and enforcement activities in the co-permittee areas of Jefferson County, but does not have the legal authority to operate those programs in the co-permittee jurisdictions. If the MSD continues to implement the IDDE, industrial stormwater, and construction stormwater inspections and enforcement for the co-permittees, it must ensure it has the legal authority specified in the KPDES MS4 Permit.

The MS4 Permit requires the MSD to develop industrial inspection and enforcement procedures. The MSD developed a preliminary but not a complete set of inspection procedures for MS4. The MSD has not developed and implemented a formalized set of criteria and/or procedures for MS4 construction site inspections.

In view of your MS4 Annual Report dated December 28, 2012, it appears that the above issues have not been addressed. Please provide copies of the current inter-local agreements and the current MS4 criteria and/or procedures for industrial and construction site inspections, and the date in which these findings will be resolved.

Louisville MSD Program Changes



Industrial

- Expanded Industrial Inspections
- No New Regulation, but Minor Updates to Clarify purpose and Access
- Primary Industrial Regulation Dates Back to 1980's Sewer Explosion



Industrial

- **NEW Inspector Standard Operating Procedures (SOPs)**
- **3rd Party Inspector Refresher Training**
 - Review Requirements
 - Mentor and Encourage
 - NOT Inspector Audit
 - Increase Consistency



Construction

- Expanded Inspector Standard Operating Procedures (SOPs)
- 3rd Party Inspector Refresher Training
 - Review Requirements
 - Mentor and Encourage
 - NOT Inspector Audit
 - Increase Consistency



Transition to Green Infrastructure Requirements

- MSD Starts Green Infrastructure 2009*

LEARN

**Need
More**

- MSD Incentivizes Private Green 2011

LEARN

**Need
More**

- MSD Requires Private Green 2013

KSA



Green Incentives

➤ Green Incentive Program

- Started August 2011
- **Stipend:**
Short-term Incentive
- **Credit:**
Long-term Incentive



Post-Construction Regulation: How Detailed?



- 6 New Pages
- Process
 - Plan Approval
 - Site Disturbance Permit
 - Construction Inspection
 - Enabled Bonds
- O&M Agreement
- Qualified Inspector Program
- Enable Fee-in-Lieu Program
 - In Design: Likely 2014 Startup
- **Enable Standard and Details per Design Manual**
 - **Routinely Updated per Chief Engineer**

GMP Manual: Agreements



MSD
Metropolitan Sewer District

Green Management Practices (GMP)
18.11 Stormwater Quality Maintenance Agreement

STORMWATER QUALITY MAINTENANCE AGREEMENT

BETWEEN THE

**LOUISVILLE AND JEFFERSON COUNTY
METROPOLITAN SEWER DISTRICT**

AND

PERTAINING TO:

LONG-TERM OPERATION AND MAINTENANCE RESPONSIBILITIES

THIS MEMORANDUM OF AGREEMENT ("MOA"), made and entered into on this the _____ of _____ of 20__ ("Effective Date") by and between the Louisville and Jefferson County Metropolitan Sewer District ("MSD"), 700 West Liberty Street, Louisville, Kentucky 40203, and _____ ("Property Owner"), _____, Louisville, Kentucky 402__, (MSD and Property Owner hereinafter referred to as the "Parties").

WITNESSETH:

WHEREAS, MSD is a public body corporate and political subdivision organized pursuant to Chapter 76 of the Kentucky Revised Statutes whose primary responsibilities are the operation, maintenance, and regulation of public and private sewers and drains, and the discharge of waste and waters into the sewer system; and

WHEREAS, MSD has statutory and regulatory authority to undertake projects to improve the public sewer and drainage system, which includes green infrastructure best management practices (also known as Green Best Management Practices (BMPs or GMPs) or long-term stormwater quality controls) for the purpose of managing the inflow of storm water runoff pollutants into the Combined Sewer System and/or Municipal Separate Storm Sewer System as is required of Louisville, MSD and its co-permittees through Kentucky Pollutant Discharge Elimination System Permit KYS000001; and

WHEREAS, the Property Owner's proposed green infrastructure practices are required to operate over the long-term use of the property in order to reduce runoff into the public Combined Sewer System and/or runoff pollutants into the public Municipal Separate Storm Sewer System.

NOW THEREFORE, in consideration of the promises and mutual covenants contained herein, and other good and valuable consideration, the Parties hereto agree as follows:

- (1) **PROJECT SCOPE OWNER AND LOCATION:** The Property is owned by _____; zoned as _____; being operated as a _____; and, is required to implement green infrastructure best management practices at its property located at _____, Louisville, Kentucky ("the Property"); and the Property Owner agrees to and shall construct and install green infrastructure at the Property consisting of the green infrastructure best management practices (BMPs) set forth in "Exhibit A" attached hereto, which Exhibit is hereby incorporated into and made a part of this Agreement ("the Project") as if fully set forth herein. The BMPs shall be constructed in accordance with plans prepared by a qualified professional in accordance



- **Stipends**
 - Green Construction Reimbursements
 - One Time, 10-yr closure
- **Credit**
 - Monthly Bill Discount
 - 10-yr renewable
- **Everybody / General**
 - Indefinite

Green Infrastructure Guidance



- 2011 New
- 2013 Expanded

- Planning / Strategy
- Selection
- Design
- Operation
- Maintenance
- Inspection
- **Checklists and Aids**
- **Examples and Guides**

Post-Construction Qualified Inspection

Metropolitan Sewer District (MSD)

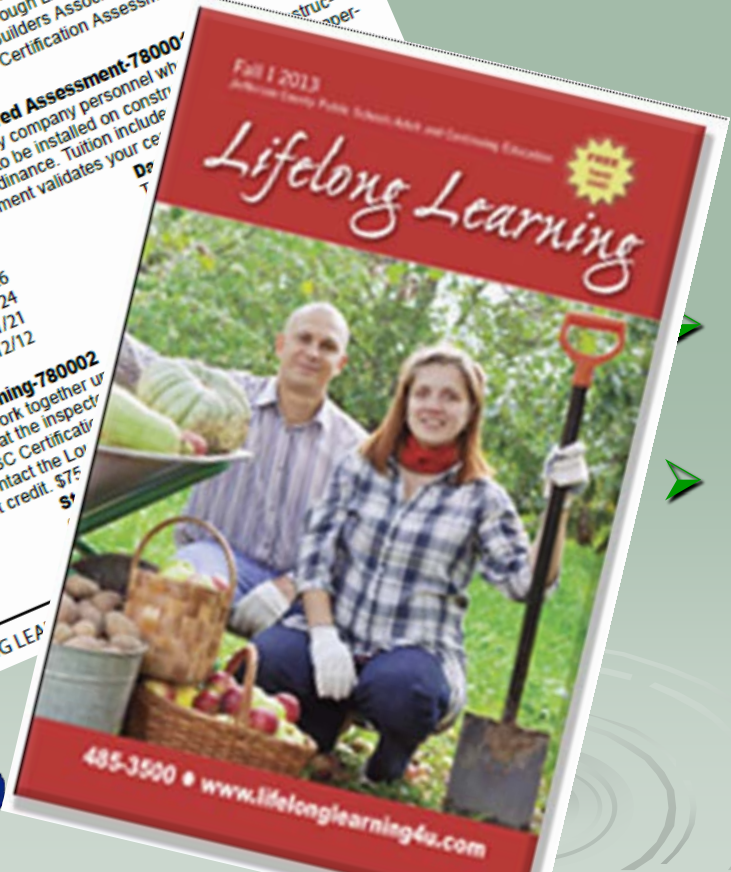
MSD Erosion Prevention and Sediment Control (EPSC) Training and Assessment Classes
In compliance with the Louisville and Jefferson County EPSC Ordinance, area home builders, contractors, MSD inspectors, and certified plan reviewers are required to attend training sessions and receive certification. Classes include a required assessment. Certifications for classes are valid for three years. Pre-registration required through Lifelong Learning only. Classes held at the Gheens Academy, 4425 Preston Hwy. or Home Builders Association of Louisville, 1000 N. Stourme Pkwy. Check our website for a list of Certification Assessment Tips.

MSD Contractor EPSC Training and Required Assessment-78000
Designed for contractors, inspectors, and utility company personnel with construction experience, this class explains the EPSC measures to be installed on construction projects necessary to comply with the EPSC ordinance. Tuition includes a required assessment. Successful completion of the assessment validates your certification.

Start
08/27
09/26
10/24
11/21
12/12

MSD Home Builder EPSC Training-780002
Home builders and inspectors work together to understand what the EPSC measures to be installed. To receive EPSC Certification, you must complete the assessment. Successful completion of this class may contact the Louisville Professional Development credit. \$75.

1 Meeting
31032 Gheens
32203 Gheens
32204 Gheens
32205 Gheens
32206 Gheens



- Long History / Experience
 - EPSC Courses
 - Public School System Adult Lifelong Learning Program (ALLP)
- MSD Provides Content and Instructor
- ALLP Provides:
 - Administration
 - Fee Collection
 - Advertising
 - Registration Reminders

Thank you

Questions? Call us!

Chad McCormick, PE, CFM

Jennifer Herrell, PE, CFM



Land Design and Development, Inc.
503 Washburn Ave
Louisville, KY 40222
(502) 426-9374
(502) 724-9356 Cell
mccormick@ldd-inc.com



City of Shelbyville
Public Works Department
787 Kentucky Street
Shelbyville, KY 40065
(502) 633-1094
(502) 633-5481 fax
jpherrell@mw.twcbc.com