Center for Environmental Excellence by AASHTO
Stormwater Management Briefing Paper

Department of Transportation
MS4 Audit Tools

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American Association of State Highway and Transportation Officials
AASHTO
The Voice of Transportation

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Federal Highway Administration

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Disclaimer

This document summarizes the discussions of the participants who presented/spoke as individuals and may not necessarily represent their agency's views or positions. In addition, the contents of the document do not necessarily represent the views or positions of Center for Environmental Excellence by American Association of State Highway and Transportation Officials (AASHTO), Federal Highway Administration (FHWA), or Michael Baker International.

Acronyms

AASHTO	American Association of State Highway and Transportation Officials
ACL	Administrative Civil Liability
ADOT	Arizona Department of Transportation
AOC	Administrative Order on Consent
BMP	Best Management Practice
Caltrans	California Department of Transportation
CWA	Clean Water Act
DOT	Department of Transportation
FHWA	Federal Highway Administration
FPPP	Facility Pollution Prevention Plan
IC/ID	Illicit Discharge/Illegal Connection
IDDE	Illicit Discharge Detection and Elimination
MS4	Municipal Separate Storm Sewer System
NOI	Notice of Intent
NOT	Notice of Termination
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
PHF	Pesticide, Herbicide and Fertilizer
PY	Person Years
RWQCB	Regional Water Quality Control Board
SOP	Standard Operating Procedure
SPCC	Spill Prevention, Control, and Countermeasure
SSO	Site-Specific Objective
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load
USEPA	U.S. Environmental Protection Agency

1. Introduction

Departments of Transportation (DOTs) are subject to audits of their stormwater management programs by state and federal regulators to assess compliance with their stormwater National Pollutant Discharge Elimination System (NPDES) permits. These audits are generally comprehensive, examining all aspects of the DOT stormwater program, and can lead to enforcement actions if the audit uncovers deficiencies in permit compliance.

This Briefing Paper has been developed by the Center for Environmental Excellence to provide DOTs with experiential information about the audit process, how to prepare for an audit, what to expect during an audit, and what follow-up actions should be taken at the conclusion of the audit. This report has been developed based on the audit process used by the U.S. Environmental Protection Agency (USEPA), not state audits. However, the information may be useful for state audits.

A Technical Committee comprised of stormwater management program managers from selected DOTs was responsible for the preparation of this document. The Technical Committee consisted of:

- American Association of State Highway and Transportation Officials (AASHTO)
- Arizona Department of Transportation (USEPA Region 9)
- California Department of Transportation (USEPA Region 9)
- Delaware Department of Transportation (USEPA Region 3)
- Federal Highway Administration (FHWA)
- Minnesota Department of Transportation (USEPA Region 5)
- Pennsylvania Department of Transportation (USEPA Region 3)
- Virginia Department of Transportation (USEPA Region 3)
- Washington State Department of Transportation (USEPA Region 10)

1.1. Approach

The information provided in this paper represents the collective experience of the program managers from the Technical Committee. In addition, interviews were conducted with selected DOTs that had recently been audited for stormwater program performance by the U.S. Environmental Protection Agency (USEPA). The DOTs that were interviewed included:

- Arizona Department of Transportation
  - Audit was conducted on October 25-29, 2010
  - Audit report was issued on May 10, 2011
  - Received an Administrative Order On Consent on April 19, 2013
- California Department of Transportation
  - Audit was conducted on October 5-7, 13-14, 21-22, 2009
  - Audit report was issued on February 26, 2010

- Washington State Department of Transportation
  - Audit was conducted on January 31 – February 1, 2012
  - Audit report was issued on May 7, 2012
- Pennsylvania Department of Transportation
  - Audit was conducted on August 1-5, 2011
  - Audit report was issued on February 7, 2013
- Minnesota Department of Transportation
  - Audit was conducted on August 10-12, 2010
  - Audit report was issued on March 23, 2011
- Delaware Department of Transportation
  - Audit was conducted on April 18-19, 2013, and a follow-up visit on July 24, 2013
  - Audit report was issued on August 22, 2013

The interview included a series of questions designed to determine how the audit was conducted, the level of preparation by the DOT and the benefit of such preparation, and the overall outcome of the audit.

1.2. Use and Structure of Briefing Paper

This paper is structured into three primary sections:

1. The Audit Process – What to Expect
2. Audit Preparation
3. Lessons Learned

The information in these sections was developed from the DOT surveys, interviews and experience of the Technical Committee. Each audit process is unique, and there is no substitute for the judgment of the DOT stormwater program manager and lead staff, and their assessment of the level of implementation and documentation of the stormwater program relative to Permit requirements.

The DOT staff involved in stormwater permit implementation should use the information in this paper to prepare for and assist during the audit process, and make decisions regarding audit preparation, conduct any post-audit program changes using best professional judgment and the findings of the audit. Fundamentally, one of the most important aspects for a successful DOT stormwater program, and successful audit process is exceptional communication within the organization. DOT agency staff, from the Director on down through the organization, must understand the potential consequences of an audit, how it will be conducted, and what the likely outcome will be. The DOT must ensure that this communication is comprehensive and ongoing from the time an audit notification is received through the completion of post-audit program changes.

2. The Audit Process – What to Expect

2.1. What is an MS4 Audit?

A municipal separate stormwater sewer system (MS4) audit is an evaluation of an MS4 program to assess compliance with NPDES permit(s) and the level of implementation of the stormwater management program. The audit may be comprehensive in scope or focused on particular components of the MS4 program. Figure 1 shows the audit process.

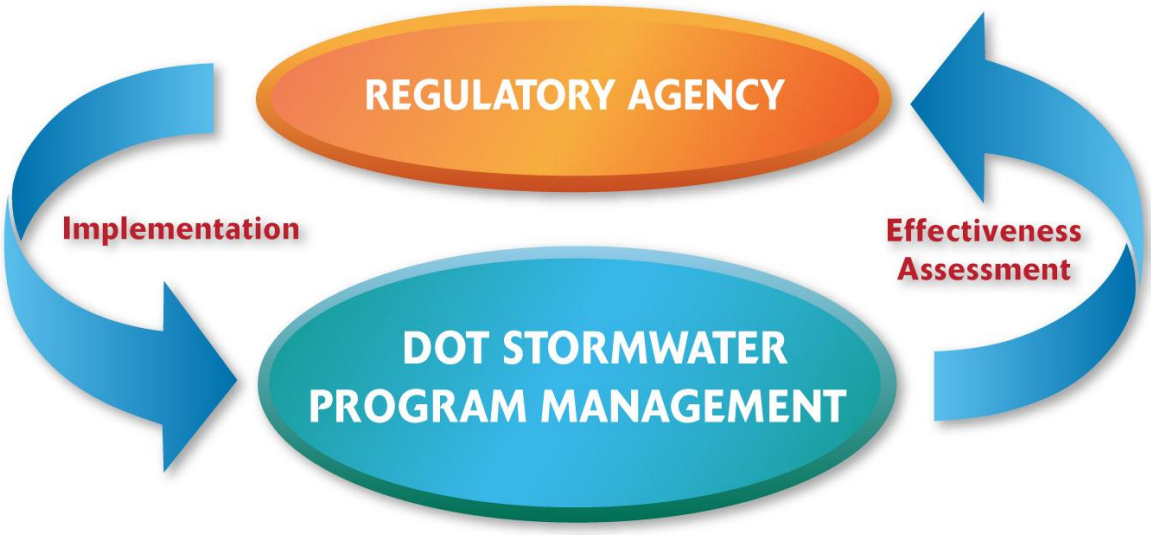

Figure 1: The Audit Process

2.2. Benefits of an Audit

Although an audit can be a daunting process, it can also be quite beneficial by fostering:

- A stronger coordination and working relationship with the State or Federal regulator(s)
- A better understanding by the permittee of regulator(s) expectations and permit requirements
- Improved clarity of interpretation of the MS4 permit
- Identification of strengths and areas for stormwater program improvement
- Improved permitting authority knowledge of the permittee's operations, priorities, constraints, and challenges

Lastly, the audit process can be the catalyst to develop and improve lines of communication within the DOT and between the DOT and regulatory agencies. Improved communication is a key variable in the successful performance of the DOT stormwater program.

2.3. Audit Process Elements

The DOT should assume the audit would encompass **all** elements of the DOT stormwater program as required in the NPDES Permit. The auditors use the Permit as the audit guide, ensuring that permit elements have been implemented, and that sufficient documentation exists to substantiate compliance.

DOTs report specific emphasis on their maintenance program, both fixed facilities, such as maintenance yards, and field maintenance activities. Construction sites are also a focus of the audit, particularly depending on the number of jobsites that are active at the time of the audit. Only one DOT of those surveyed reported that construction was not emphasized, due mainly to the fact that the DOT had little construction activity.

The most common program elements audited are:

- Management and organization
- Construction program
- Maintenance program
- Non-stormwater identification and elimination (e.g., illicit discharge detection and elimination)
- Training
- Program evaluation
- Reporting

Other audited elements can include best management practice (BMP) development and implementation (structural and operational), project planning and design, non-department activities (e.g., airspace leases), stormwater features mapping, and public education and outreach.

In general, your Permit and Stormwater Management Plan (SWMP) or Stormwater Pollution Prevention Program (SWPPP) should be your guide to compliance parameters and implementation requirements. Each of these is an enforceable document, and its requirements should be reflected in program implementation and documentation.

The audit generally begins with a presentation by the USEPA (or their contractor) to give an overview of the process, and in many cases, a presentation by the DOT, to give an overview of the current stormwater program (see Appendix C for a suggested outline). The remainder of the first day is spent in the office, and subsequent days are usually spent in the field. A portion of the final day will be reserved for a post-audit debriefing.

2.4. Notice of Audit and Timeline

The amount of time that you will be given to prepare for an audit can vary widely. Generally, the USEPA will provide you with about one to two months of notice, varying from about two weeks to four months, but there is no rule or requirement for a standard time of advance notice. In one case, a DOT did not receive any advance notice of the audit.

The purpose of advance notice is to allow the DOT time to assemble documents that are requested by the USEPA. Depending on how records are kept, this can be a substantial undertaking requiring significant staff time.

The USEPA Audit is generally conducted over a period of three days (on average), although more time may be necessary depending on the size of the state, number of DOT districts or divisions, and the number of site visits. Several months after the audit (perhaps longer), the USEPA issues a formal report to the DOT and state regulator (within a delegated state). Additionally, the report may be posted to the USEPA website. Generally, an USEPA audit follows this schedule of events:

Table 1: Typical USEPA Audit Schedule

Event	General Timeframe
USEPA issues audit agenda, including office interviews and field visits	1 week before meeting
USEPA sends document requests ahead of audit for SWMP, annual report, maps, guidance and procedural documents, manuals, training records, etc.	2–4 weeks before audit
Headquarters (office) audit (with USEPA, audit consultants, and state regulator)	1 day
District or division (field) audits	2–3 days (more if needed)
Post-audit closing audit conference (with DOT and USEPA)	1 day (may be combined above)
Preliminary summary report provided to DOT listing deficiencies and positive program elements	1–2 months after audit
Formal report issued to DOT and state regulator and posted on USEPA website	4–6 months after audit
Administrative order of consent (if appropriate) issued by USEPA	6 months after audit
Enforcement to follow (depending on severity of issues and if needed) issued by the state regulator	6 months after audit (if applicable)

2.5. Document Request

If you do receive advance notice, you will likely receive a request for documents. Requests received in the past by DOTs are provided in Appendix A. The document request will nearly always include an organizational chart, a copy of the current NPDES permit, and a copy of the current SWMP. The information commonly requested is shown below:

- NPDES Permit
- Map of the permit's geographic coverage area(s) and receiving waters, including and TMDLs and 303(d) listed waters
- SWMP
- Any formal agreements with other entities or local governments for implementation of your MS4 programs
- Organizational chart showing roles and responsibilities
- Inventory of active construction sites
- Inspection and enforcement procedures/protocol
- Examples/case files of construction site issues where enforcement was used
- Post-construction BMP manual
- BMP maintenance manual
- Inventory of operational post-construction BMPs
- Inventory of facilities (non-highway)
- Program for prohibiting illicit non-stormwater
- Records of illicit discharge/illegal connections (IC/IDs) and/or illicit discharge detection and elimination (IDDE) and resolution
- Example cases/files of IC/ID or IDDE incidents and enforcement
- Records of major outfall inspections, dry weather screening
- Characterization and monitoring plan
- Signed/approved stormwater pollution prevention plan (SWPPP) (Construction)
- Contract specifications including SWPPP approval process, incorporation of permit requirements
- Construction and maintenance staff training records
- Contractor inspection form from SWPPP
- Examples of Resident/Project Engineer letters to contractor for non-compliance
- Enforcement escalation process
- Pre-construction checklist for construction
- Annual report
- Snow removal operations plan
- Facilities SWPPP/facility pollution prevention plan (FPPP) and checklist
- Drain cleaning form
- Sweeper form

Documents are much easier to gather and provide if they are in electronic format. Most DOTs are managed as Districts, and documentation may reside in the District. Maintaining records in a central repository will assist in fulfilling the audit document request.

2.6. Who Will Audit You?

Audits are usually conducted by the USEPA, facilitated by their consultant contractor. If you operate within a delegated state, the state regulatory agency also generally attends. Based on survey and interview findings, it is generally beneficial to have a representative of the state regulatory agency present during the audit. This is because the state regulatory agency staff can explain the intent of the permit provisions and provide context for implementation. It is also likely that the state regulator has knowledge of the DOT program and, as such, has approved of how the program has been implemented, either implicitly or explicitly.

2.7. Location and Duration of the Audit

The audit will be conducted in both the office and the field. Office audit activities will focus on documentation and reporting requirements, legal authority, documentation of enforcement, training, public education and outreach, and administrative elements of the program.

The field portion of the audit will center on inspections of DOT facilities and construction sites. Maintenance facilities and storage areas (such as for trash, traction aides, and construction materials) are a key focus. Selection of maintenance and construction sites will generally be done the morning of the initial meeting with the USEPA, affording very little time (less than one day) to notify staff at sites. Travel time from the central office to the field sites is a factor, and the auditors will likely split into two or more teams to cover all of the selected sites. It is helpful to have DOT staff knowledgeable about the program accompany each team to assist with logistics, safety, and to answer questions.

The audit will generally last between two and five days, depending on the geographic scope of your audit as well as the number of lane miles you maintain, and the number of active construction and maintenance and storage facilities falling within that geographic scope.

2.8. Permit Types

Some DOTs are covered by a Phase I Permit for the entire state. Others may be a co-permittee under a Phase I Permit. Still others may be covered under multiple Phase II Permits, a combination thereof, or their own individually issued permit. The USEPA will likely focus on auditing one permit and the coverage area of that permit. There is no historical precedent for an audit of the entire DOT if it is covered under multiple permits. This is because the audit process is comprehensive and detailed. Auditing multiple permits at one time would be technically challenging. However, the USEPA may also focus the audit on only certain facilities and permit elements. Under such a scenario, it would be feasible to audit the targeted facilities or program elements under more than one permit.

3. Audit Preparation

How you will prepare for the audit is crucial and determined, in part, by how confident you are in your program implementation. Auditors are very interested in vertical consistency of implementation, from senior managers to field staff. They are also interested in comprehensive documentation of all aspects of the program, particularly the illicit discharge and dumping element. You should focus your effort on the areas of your program that you feel are weak. The field inspection component is problematic for most DOTs for Permit compliance, with a secondary objective of consistency of program implementation between sites.

3.1. How DOTs Prepare for an Audit

DOTs prepare for an audit in a variety of ways. One of the most important preparation elements will be continuous and consistent communication. **Everyone must understand the process, consequences, objectives and the desired outcome.** Some of the activities DOTs have completed before the audit include:

- Prepare staff – hold meetings and orientations to describe the process and expectations.
- Organize backup information that supports program implementation and be prepared to provide it during the audit.
- Prepare an overview presentation for auditors.
- Preselect field inspection locations to suggest to auditors.
- Inform management personnel of the audit, its importance, and what to expect. Ask top managers to attend the initial and closeout meetings with the USEPA.
- Use audit checklists.

3.2. Recommended Preparation Approach

The recommended audit approach should be refined by the DOT to reflect the priorities of the program based on weaknesses identified in program implementation. The following are strongly suggested tasks to consider for preparing for an audit.

Task 1 – Assemble Key Stormwater Program Documents

Electronic copies and/or paper copies of key stormwater program documents should be assembled in a central location. This includes the SWMP, annual reports, handbooks, manuals, records of training and inspection, plans, and correspondence.

Task 2 – Pre-Audit Coordination

It is critical to coordinate efforts between headquarters and district management and staff for audit response needs. This task includes assistance with pre-audit meetings between various divisions or bureaus that may have a role or responsibility during the audit or that may be tasked to implement stormwater requirements according to the NPDES permit. This task

includes briefing staff of the purpose and goals of the audit, planning for the audit, and providing guidance to staff on pre-audit preparation, which may include the following activities:

- Assist with planning or logistics of audit (identify participants/role).
- Assist with pre-meeting (teleconference) with auditors to plan for audit day(s).
- Prepare an overview presentation of the DOT stormwater program.
- Meet with staff and coordinate a self-audit, if desired (focus on construction, maintenance, post-construction BMPs, IDDE).
- Collect and review documents requested.
- Prepare a list of active construction sites, status, and background on Notices of Violation (NOVs).
- Prepare a list of facilities (including temporary storage sites and non-roadway) and ensure that SWPPPs/FPPPs are available.
- Inform construction and maintenance staff of probable site reviews.

Task 3 – Headquarters Audit Assistance

The headquarters portion of the audit will be focused on understanding overall stormwater program management. Items of focus for headquarters may include:

- Ensuring a clear understanding of the organizational structure with permit implementation responsibility
- Thorough knowledge of stormwater-related directives, policies, guidance
- Effectiveness and tracking of implementation according to NPDES Permit requirements
- Readiness to respond to the following potential questions:
    - What are the roles and responsibilities of the program?
    - Are consultants and/or contractor services used? If so, how?
    - How is the message of stormwater management conveyed to district staff?
    - Is a storm drain system inventory, status and information collected?
    - How is BMP (treatment) determination and process for selection incorporated into projects?
    - What is submitted to headquarters to track implementation of post-construction BMPs in projects?
    - How are construction BMP bid estimates made and done?
    - What is the process for resolution for construction enforcement? Are penalties from enforcement passed on to contractors?
    - Who has responsibility at district level for construction compliance? Who is empowered for enforcement of contractors?
    - Are facilities inspected during the permit cycle? What is the inspection frequency? Who inspects?
    - Is there a statewide database of all facilities? What information is tracked?
    - How are problem slopes (erosion) tracked and fixed?
    - What is the level of control over the districts? How is this done? Is there a consistency check?

- How does the DOT define IDDE (or IC/ID)? How is roadside dumping resolved?
- Is there a municipal coordination program?
- Is your program statewide or only limited to urbanized areas, Phase I or Phase II permitted areas?
- How do you conduct an overall program evaluation?
- Is there an overarching monitoring strategy? What is your monitoring program, characterization, any region-specific?
- Is the approved list of BMPs sufficient for addressing DOT discharge to 303(d) listed water bodies and total maximum daily loads (TMDLs)?

Task 4 – District Audit Assistance

District field audits will be focused on implementation of the NPDES Permit requirements (maintenance program, construction program, post-construction, IDDE). Implementation elements to be assessed include the following:

- Active construction sites – Construction plans, SWPPPs, and erosion plans may be requested, construction sites visited, construction BMPs reviewed (including erosion and sediment control BMPs), and construction staff interviewed about the process of inspections, correction/repairs, enforcement of contractors, follow-up on enforcements, etc.
- A list of facilities should be requested for review (observe if district has a tracking system).
- Maintenance stations should be reviewed for SWPPPs/FPPPs, BMP implementation, and maintenance staff interviewed.
- Temporary storage/stockpile sites should be visited and reviewed for compliance, BMP implementation, evaluation of potential to discharge pollutants to nearby receiving waters/storm drains.
- Post-construction BMPs tracking should be reviewed to assess how treatment BMPs are implemented in projects and racked for operation and maintenance.
- Review of each district's process for IDDE (IC/ID) tracking. How are these known, tracked, and resolved?

4. Lessons Learned

4.1. General Suggestions and Recommendations

Lessons learned from past audits reflect the level of implementation of the stormwater program at the DOT, the level of management buy-in to the program, the relationship between the DOT, the USEPA and the state regulatory agency, and how prescriptive (or general) the NPDES permit requirements are. Appendix C provides some case studies of past audits, including a summary of lessons learned from each. Some of the lessons learned from DOTs on past audits are:

Do not wait— *Start preparing now*! You may hear informally that you are going to be audited, but timing of the official notice may lag significantly. Start working on preparation as soon as you hear from a credible source that an audit is planned. The auditors will have a large (potentially enormous) information request, which will consume a significant amount of staff time. In general, DOTs estimate from 0.1 to 0.5 person years (PYs) to prepare for an audit.

***Know the weaknesses in your organization*, especially when it comes to implementation.** Many times, a single division or group is responsible for implementation of the permit, and ownership of permit responsibilities may be an issue outside of this group. Identify program areas that are not robust and make changes to correct potential issues ahead of the audit.

Admit when you are wrong, but *defend your program when you are right*. You do not have to take the auditor's word that you are doing something wrong. DOTs are unique and have unique program and safety constraints. The auditors are used to reviewing traditional municipal type MS4 programs and may not appreciate DOT specific issues or the nuances of your permit. Spend the time to defend your implementation of a permit element when appropriate.

Expect the possibility that *you may receive an enforcement action*. DOT experience is that some audits are conducted or perceived to be punitive. This varies from region to region and case by case. The auditor may view their first priority as finding something wrong. In these cases, do not offer more information than requested. Treat the audit like a legal deposition. Bring appropriate staff to support the explanations of the implementation of your program.

Start and end with *good internal communication*. The Director and field staff all need to know what will be happening and what to expect during an audit. This is the time for transparency. Roles and responsibilities for permit implementation must be clearly identified and understood by the entire management team. Implementation of the permit should not be viewed as a problem for a few staff – a culture of environmental stewardship should ideally be created, similar to the culture of safety present at most DOTs.

4.2. Tools and Checklists

Checklists are provided in Appendix B of this briefing paper. **It is highly suggested that you perform continual self-audits.** Hold meetings to inform staff of, and orient to, the audit process. Inform management of what will occur during and after the audit, and to obtain their support to expend the time and resources necessary to prepare for the audit.

It is important to understand the potential breadth and depth of the audit, which can be comprehensive and will require a variety of staff. Do not hesitate to bring in the appropriate staff; they must sit at the table and respond to the auditors if you are going to affect lasting change in the organization. Some of the staff may not know the answer to an auditor's question. Counsel staff to say they do not know if they are unsure, but to refer the auditor to the person in the DOT responsible for the activity. Note also that major activity that is occurring at maintenance facilities or other locations during an audit may be a distraction to DOT staff and auditors.

One DOT interviewed formed an 'audit management group', and an audit management oversight group, to prepare for the audit. These two groups held meetings to discuss audit preparation activities. A reference that can be used is the MS4 Program Evaluation Guidance published by the USEPA Office of Management.

4.3. Update Your Program in a Timely Manner

If permit-related deficiencies in your stormwater management program are exposed during the audit, revise the SWMP or other appropriate plans or procedures to correct the deficiency. This action will be beneficial for two reasons. First, if you can correct the problem and follow-up with the USEPA to demonstrate you have made the corrections, you are less likely to receive an enforcement action. Second, the USEPA (or its delegated state authority) may use audit findings to craft subsequent versions of your NPDES Permit. Strengthening your program in an area identified by the audit may help you to avoid additional permit requirements in the next permit iteration.

The audit may also identify organizational or structural changes that are needed to ensure stormwater program compliance. An audit can serve as a catalyst to further examine organizational changes. AASHTO has developed several publications on DOT organization.

Below is a suggested checklist for post-audit follow-up.

Post-Audit Checklist

Prompt attention to these items as soon as feasible will help smooth interaction with the regulator.

- ❒ Follow-up on deficiencies noted
- ❒ Prepare a corrective action plan and schedule to submit to USEPA
- ❒ Follow-up with district staff (request for resolution action plan)
- ❒ Follow-up with various divisions or functional units affected (construction, maintenance, and design with a request for resolution action plan)
- ❒ Review the USEPA Preliminary Summary and submit a request for discussion to understand and clarify expectations
- ❒ Discuss possible outcomes with USEPA (Audit Manager)
- ❒ Inform management of possible outcome and request, as needed, issuance of headquarters directives and resource/funding

Common Stormwater Program Deficiencies

Learn from other DOTs' experience! Typical issues that have been observed during a DOT audit include:

- Lack of a uniform statewide stormwater program
- Insufficient implementation of construction site BMPs
- Inadequate construction inspection and enforcement practices
- Lack of SWPPPs and/or FPPPs for maintenance stations
- Inadequate highway sweeper BMPs, disposal, and equipment washout
- Inadequate highway slope inspection and stabilization
- Inadequate storm drain system maintenance
- Inadequate tracking, resolution of IDDE (IC/ID) statewide
- Inadequate tracking of post-construction BMPs and maintenance
- Lack of documentation of training classes conducted and staff trained

After the Audit: Potential Impacts to the DOT

Potential effects that the audit could have on the DOT include:

- More prescriptive permit requirements in the next permit round.
- Future audits of other DOT districts to test corrections made.
- Issuance of an Administrative Order of Consent (AOC) (depending on seriousness of findings), which would shield the DOT from possible third party lawsuits.
- Use of the audit as basis for enforcement by the state regulator, and/or request for formal corrections and reporting on progress via annual report or separate documentation. Fines at the state and federal level are also possible.

Appendix A: USEPA Document Request

Documentation Request List

Part of the USEPA audit includes evaluating a DOT's stormwater program documents. Auditors ask for a variety of documents such as staff organization charts and contacts, facility SWPPPs, manuals and guidance documents, past Annual Reports, impaired waters, inspection forms, and mapped outfalls. Be prepared with hard copy documents and/or website links for their evaluation.

Table 2: List of USEPA-Requested Documents in Preparation for a DOT Audit

Document
Annual report templates
Any applicable documentation relating to permit requirements to identify and cooperate with local stormwater master planning processes and metropolitan planning organizations to protect the designated uses in all receiving waters from the effects commonly associated with urbanization
Call logs related to the DOT hotline for illicit discharges
Communication escalation process
Constructability guide (best practices)
Construction manual (regulatory mechanism and legal authority)
Construction organizational chart
Construction site enforcement procedure, if one exists
Construction site inspection procedure, if one exists
Construction site plan review procedure, if one exists
Construction SWPPP template
Contact information for all MS4 geographic areas
Contract specifications, including SWPPP approval process, incorporation of permit requirements, etc.
Contractor inspection form from the SWPPP
Current characterization and monitoring plan
District construction training records
District inventory of active construction sites (map with active segments)
District inventory of facilities (all non-highways subject to the stormwater program)
District inventory of post-construction BMPs
Drain cleaning forms
Dry weather screening program and associated documents (such as inspection forms, inspection schedules and tracking mechanisms, outfall maps, etc.)
Enforcement related documents for construction sites (last three years)
Erosion and pollution control manual
Example case/files of illicit discharge incidents and where enforcement was issued
Examples of resident engineer letters to contractors for non-compliance
Facilities SWPPPS/FPPPS and checklists – DOT staff and consultant versions, if different

Document
Five-year transportation facilities construction program
IDDE stormwater related training and the list of attendees
Information program/education and training materials for construction site operators
Inspection and enforcement procedures/protocol
Inspection records for salt pile management
Inspection/maintenance records of municipal operations
Instructions on filling out the construction SWPPP template
Investigation records related to outfalls with suspected illicit discharges
List of all active construction sites for the DOT statewide
List of allowable non-stormwater discharges, post-construction BMPs, site development, construction site provisions, and enforcement. Provide source links if available online.
List of DOT owned/operated facilities (e.g., parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations, snow disposal areas) including addresses and hours of operation, with a map illustrating the locations
List of events (i.e., spills, suspected illicit discharges, etc.) and the related formal and informal enforcement actions taken by DOT related to illicit discharges within the MS4
List of personnel within the MS4 responsible for program implementation (i.e., management, inspectors, plan reviewers, etc.) And their contact information
List of pesticide, herbicide and fertilizer (PHF) program BMPs to reduce pollutants to the MS4
List of storm drain system maintenance prioritizing for chronic areas
Maintenance and facilities BMP manual
Maintenance organizational chart
Methodology final stabilization
Monitoring plan
Monitoring records and reports, including any dry weather screening
Organizational chart for the entire DOT
Personnel training documents and records
Policies and contract agreements to address post-construction runoff from new development and redevelopment that requires appropriate BMPs to be applied
Post-construction BMP manual
Pre-construction checklists for construction stormwater coordinators
Procedure for receipt and consideration of information submitted by the public
Procedures and documents illustrating compliance with SWMP and permit requirements
Procedures and documents illustrating compliance with SWMP and permit requirements
Procedures for long-term operations and maintenance of BMPs
Procedures for the proper disposal of waste removed from the MS4 (such as accumulated sediments, floatables, and other debris)
Program organizational chart (roles and responsibilities)
Projects in the five year program located near unique and impaired waters
Public education plan to promote public reporting of illicit discharges and improper disposal

Document
Records of construction site inspections (last three years). This could include logbooks, checklists, photographs, plans reviewed by the DOT, and other records if they exist
Records of construction site plans reviewed for erosion and sediment control and related review documents (last three years)
Records of IC/IDs and resolution (calendar year)
Records of major outfall inspections, dry weather screening
Records of sanitary sewer overflows (SSOs) reported to state within the MS4
Records related to inspection and maintenance activities for DOT owned BMPs
Records related to inspection and maintenance activities for DOT owned structural controls
Regulatory mechanism prohibiting illicit non-stormwater discharges to MS4s
Regulatory mechanism used for MS4 program legal authority and prohibition of non-stormwater discharges. DOT policy on storm sewers and offsite drainage; right of way drainage permit; right of way encroachment permit; DOT policy on accommodation of utilities on highway rights of way. Provide source links if available online.
Routine maintenance activities plan for DOT owned structural controls
Salt pile management site list and map
Sediment control and water quality protection BMP details
Signed/approved SWPPP (construction)
Snow removal operations plan
Spill prevention, control, and countermeasure (SPCC) plan(s), if the MS4 requires one for a municipal facility within the MS4
Spill response plan (e.g., standard operating procedures) to prevent, contain and respond to spills
Standard operating procedures (SOPs) and other documents the DOT uses to ensure permit compliance, including but not limited to plan review forms, inspection checklists and forms, enforcement response plans, inspection procedures, sampling procedures, etc.
Standard operating procedures and review/evaluation of snow removal and deicing practices
Statewide stormwater management plan (SWMP)
Storm drain system map(s) in electronic format (such as a pdf) illustrating the location of all outfalls and the names and locations of all waters of the state that receive discharges from those outfalls
Stormwater enforcement response plan
Stormwater monitoring guidance manual for construction activities
Stormwater monitoring guidance manual for industrial activities
Stormwater monitoring guidance manual for MS4 activities
Structural and non-structural BMP requirements and procedures adopted by the DOT
Sweeper forms
SWMP modification requests to the state with the state's response for the permit term
SWPPP plans associated with DOT owned facilities
Training module for municipal operations stormwater training and lists attendees (last three years)
Unique, impaired, and not attaining waters state maps by county

Appendix B: History of DOT Audits

Audits and DOTs

Phase I DOT stormwater programs are entering their 20th year of existence, and Phase II programs have been established for about eight years. Accordingly, the states and the USEPA are interested in using the audit process to assess compliance, improve program performance and implementation, and enforce NPDES permit requirements. DOTs have experience in completing the auditing process and can improve their performance on future audits by incorporating audit feedback into their stormwater programs.

To date, the following DOTs have been audited:

Table 3: DOT Audit History

	State Department of Transportation	Auditing Agency	Year of Audit
1.	Arizona Department of Transportation	USEPA	2010
2.	California Department of Transportation	USEPA	2009
3.	Colorado Department of Transportation	State	2013
4.	Delaware Department of Transportation	USEPA	2013
5.	Hawaii Department of Transportation	USEPA	2009
6.	Michigan Department of Transportation	USEPA	2014
7.	Minnesota Department of Transportation	USEPA	2010
8.	Nevada Department of Transportation	USEPA	2011
9.	New York Department of Transportation	USEPA	2012
10.	Ohio Department of Transportation	State	2013
11.	Pennsylvania Department of Transportation	USEPA	2011
12.	Rhode Island Department of Transportation	USEPA	2011
13.	Utah Department of Transportation	USEPA	2014
14.	Virginia Department of Transportation	USEPA	2012
15.	Washington State Department of Transportation	USEPA	2012

Figure 2 depicts the location of recent audits specific to DOTs.

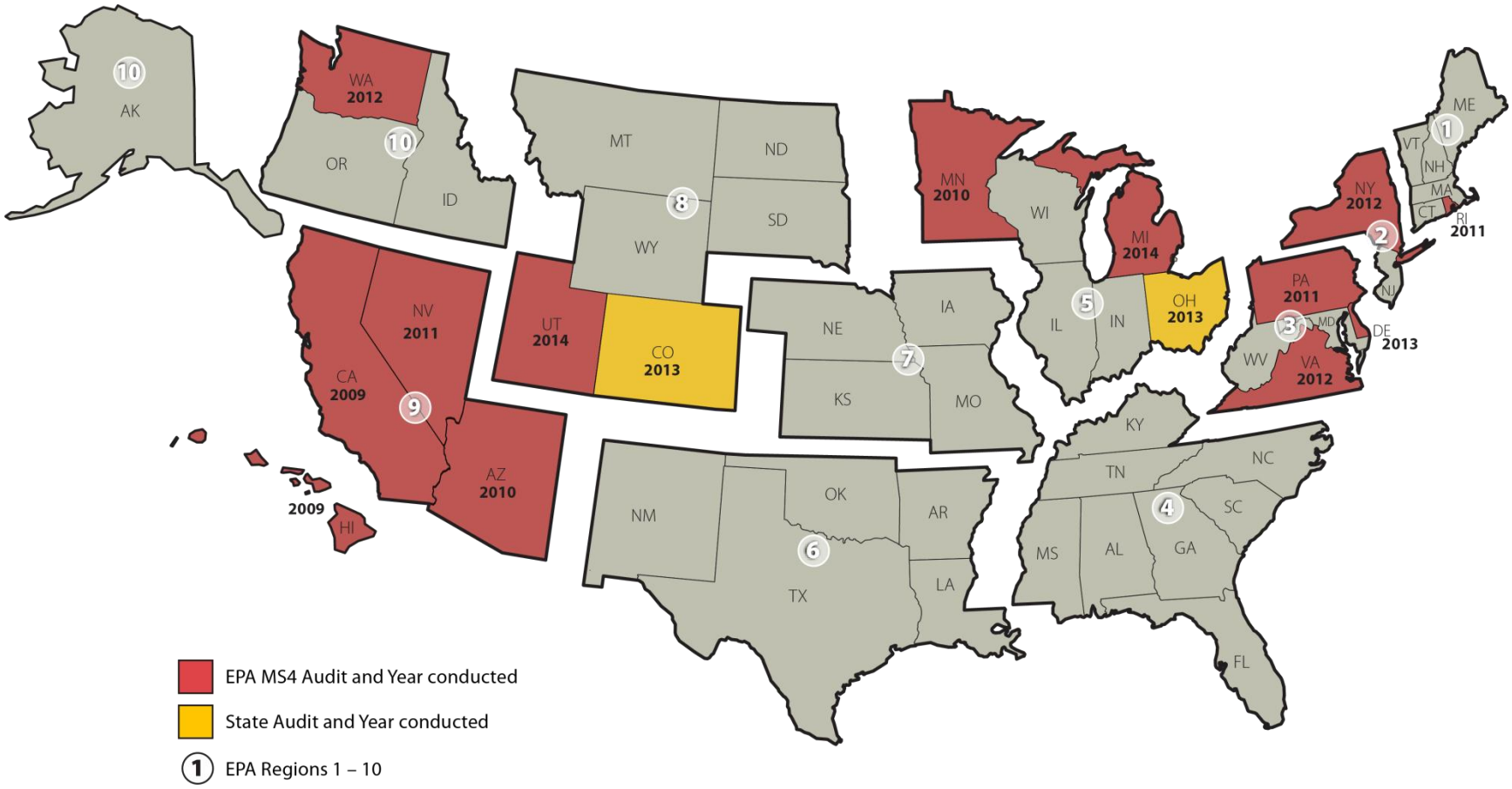

Figure 2: State DOT Stormwater Program Audits History

Appendix C: Suggested Orientation Presentation Outline

Suggested Orientation Presentation

Create an orientation presentation for the auditor that outlines your DOT's organization and highlights of your stormwater management program. The presentation should include the following:

1. **Overview: Topics that will be covered in the presentation**
    a. DOT Background
    b. DOT Permit and Stormwater Program
    c. Roadway Engineering Group
    d. Construction Group
    e. Maintenance Group
    f. Industrial Facilities
2. **DOT Organizational Chart**
    a. Roles
    b. Responsibilities
    c. Statewide Stormwater Policies
3. **DOT Background**
    a. Number of employees
    b. Number of FTE dedicated to water quality
    c. Programs referenced in the permit for public involvement
    d. Stormwater budget
    e. Market status: Hiring freeze? Open positions? Is work completed by consultants?
    f. Number of Districts (include graphical map of districts)
    g. Do roadways run through National or State parks, Indian reservations, or Federal Lands (Bureau of Land Management or Forest Service)?
4. **DOT Permit Background and Stormwater Program**
    a. Phase I, Phase II, Phase I and II, Co-Permittee?
    b. Permit Dates
    c. Permit Issued
    d. Permit Expires
5. **MS4**
    a. Is the MS4 statewide? Does it cover all roadways, drainage channels, associated rights of way, maintenance yards, park and ride lots, rest areas, and so on?
    b. How many monitoring locations?
    c. Do the maintenance yards require SWPPPs or BMPs?
    d. Are the yards near impaired waters?
    e. Is there a need for post-construction BMPs?
6. **Roadway Engineering Group**
    a. Process for incorporating water quality in planning and design
    b. Environmental Documentation Phase
    c. Post-Construction BMP Manual

d. BMP Toolbox
e. Effective control of stormwater pollutants and erosion for the life of a roadway
f. Specifications

7. Construction Group

a. Is the permit identical to the state construction general permit?
b. Who is responsible for conditions in both permits?
c. Who submits Notice of Intent/Notice of Termination (NOI/NOT) for projects? (DOT staff or contractors)
d. Who performs inspections? (For example, an Erosion Control Coordinator?)
e. How are violations and enforcement actions tracked?
f. Do you have Stormwater Monitoring Guidance Manual or similar?
    - Was it developed to provide consistent monitoring for projects?
    - Does it include a process for incorporating water quality monitoring during construction projects?
    - Does it describe requirements?
g. SWPPP Template
h. How often is the SWPPP updated, and when was the last modification?
i. Enforcement Response Process
j. Roles and Responsibilities

8. Maintenance Group

a. Roadside
b. Vegetation Management
c. Snow/Ice Control
d. Facilities SWPPP
e. Maintenance and Facility BMP Manual

9. Industrial Facilities

a. How many and what types of industrial facilities?
b. Sign shop, Print shop, Airport, Ports?
c. Material source site?
d. Are SWPPPs required?

10. Enforcement Response Plan

a. Construction Sites
b. Encroachment Permits
c. Illicit Discharge Detection and Elimination (IDDE)
d. Tracking
e. Response (elevation of response)

11. Resources for Additional Information

a. Website URL and location of:
b. Manuals
c. Stormwater Management Plan (SWMP) Maps