

NEBRASKA



Good Life. Great Journey.

DEPARTMENT OF TRANSPORTATION

NPDES Municipal Separate Storm Sewer System – Stormwater Management Plan

NE0134015 PERMIT TERM: 2018-2022

MARCH 2018

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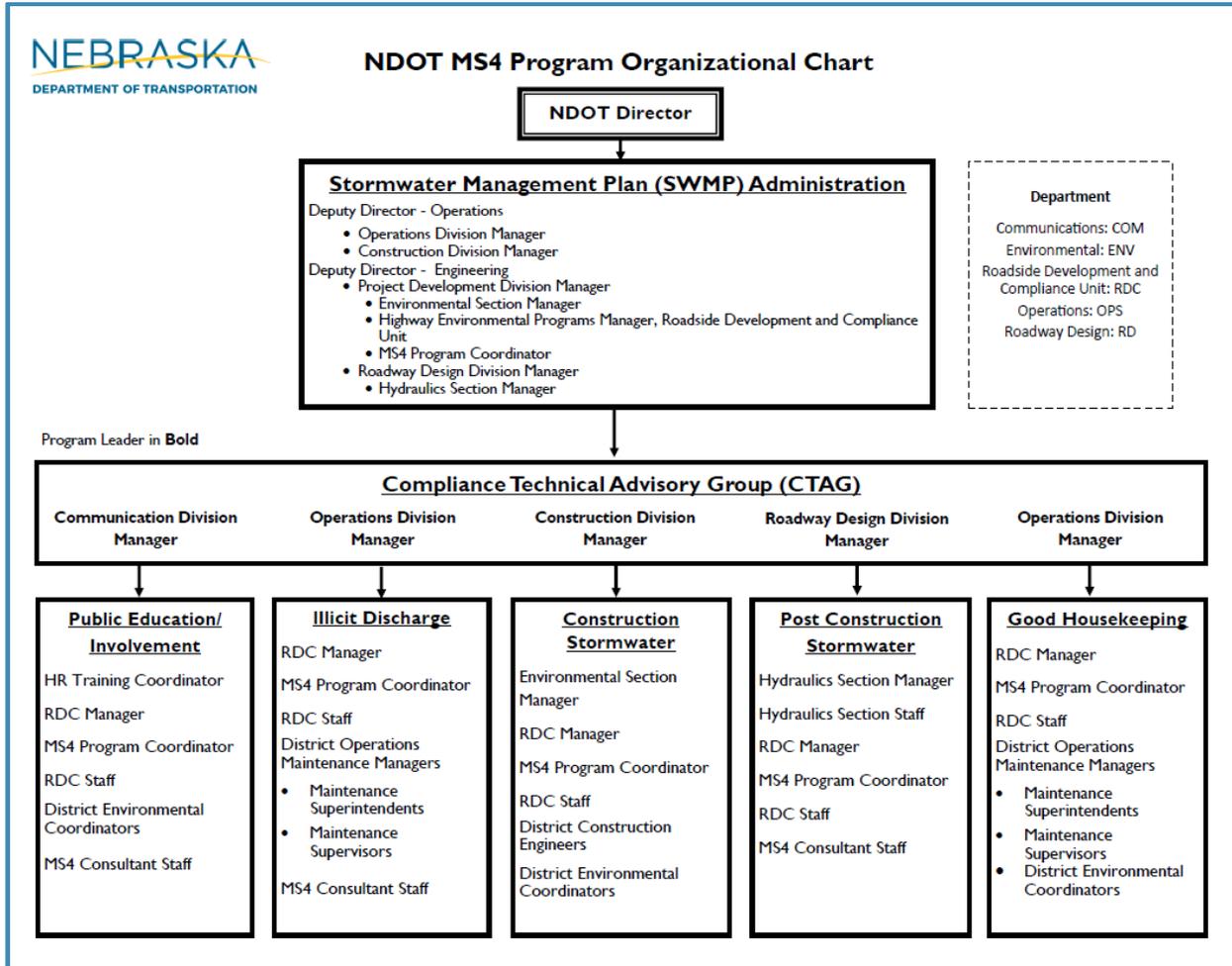
MS4 PROGRAM SUPPLEMENTAL DOCUMENTS

Construction Stormwater Plan March 2018
Post Construction Stormwater Plan March 2018
Illicit Discharge Detection and Elimination (IDDE) Plan..... March 2018
Good Housekeeping and Pollution Prevention Plan..... March 2018
Operations Environmental Procedures..... March 2018

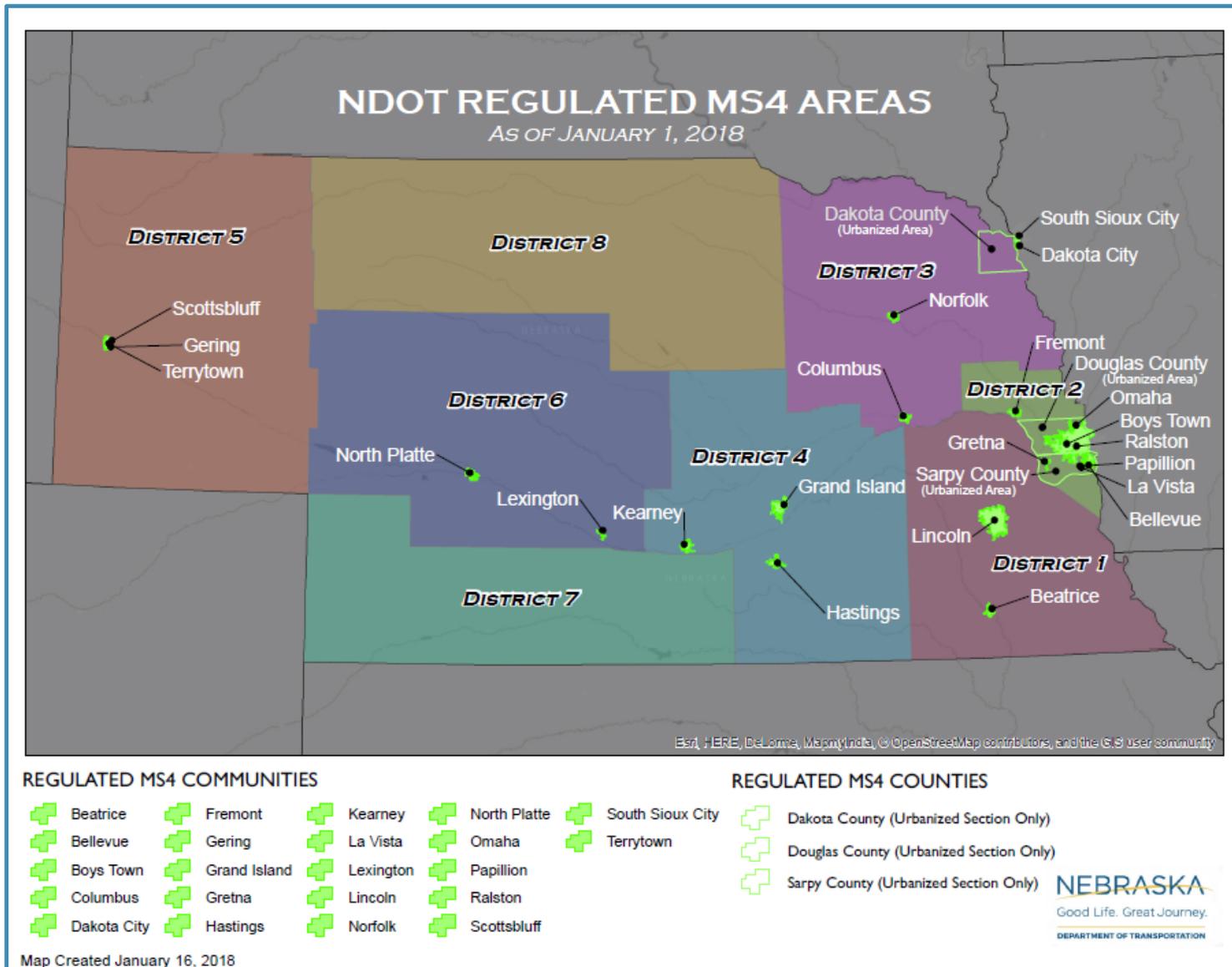
PROGRAMMATIC ABBREVIATIONS

AGC	Association of General Contractors
BMP	Best Management Practice
CSW	Construction Stormwater
CTAG	Compliance Technical Advisory Committee
DCE	District Construction Engineer
DDECM	Drainage Design and Erosion Control Manual
DE	District Engineer
DIRK	District Incident Reporting Knowledgebase
DOMM	District Operations and Maintenance Manager
ECODatabase (ECOD)	Environmental Commitments Oversight Database
FRCF	Facility Runoff Control Plan
GHPP	Good Housekeeping and Pollution Prevention
GIS	Geographic Information Systems
IDDE	Illicit Discharge Detection and Elimination
LTAP	Local Technical Assistance Program
MCM	Minimum Control Measure
MS4	Municipal Separate Storm Sewer System
NDEQ	Nebraska Department of Environmental Quality
NDOT	Nebraska Department of Transportation
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
PCSW	Post Construction Stormwater
PEO	Public Education and Outreach
RDC	Roadside Development and Compliance
STF	Stormwater Treatment Facility
SWMP	Storm Water (Stormwater) Management Plan
SWPPP	Storm Water (Stormwater) Pollution Prevention Plan

MS4 PROGRAM ORGANIZATIONAL CHART



Implementation of the Stormwater Management Plan by NDOT involves a diverse group of stakeholders across multiple Divisions and Districts. The NDOT Director assigns administrative oversight of the SWMP to the two Deputy Directors. Deputy Directors look to various Managers to assign staff and resources to implement the program standards required by NDEQ and the MS4 Permit. The Compliance Technical Advisory Group has been instrumental in the communication of MS4 Permit and SWMP requirements. This group of Division Managers and their key staff participate in the review and recommendation of programs, policies and practices that protect stormwater quality from NDOT operated properties. A host of staff members throughout the Agency play the key role of implementation and communication of the adopted program standards. Throughout the year, these staff members work with NDOT employees, consultants, contractors, vendors and the public to help reinforce and, when necessary, enforce the BMPs represented in this SWMP.



STORMWATER MANAGEMENT PLAN DOCUMENT BACKGROUND

This Stormwater Management Plan (SWMP) documents commitments made by Nebraska Department of Transportation (NDOT) to implement stormwater management procedures and practices. NDOT maintains compliance as required by a National Pollution Discharge Elimination System (NPDES) permit issued by Nebraska Department of Environmental Quality (NDEQ). This Permit is issued to regulate the quality of stormwater runoff from within the regulated boundary. The Federal Clean Water Act establishes the permit authority as well as the compliance requirements that NDEQ enforces. The purpose of the NPDES permit is to reduce the risk of stormwater pollution in local receiving waters. NPDES Permit number NE0134015, issued to NDOT in August of 2012, was reauthorized January 1, 2018.

Procedures have been developed to comply with each of the six Minimum Control Measures (MCM) stated in the permit. Each of the MCM procedures and activities is reviewed by the NDEQ as part of the annual reporting process and are described as follows:

1. Public Education, Outreach and Involvement: NDOT distributes educational materials and conducts training that describes impacts of stormwater discharges on water bodies and steps that the target audience can take to minimize their role in stormwater pollution. NDOT also engages its target audience in development and review of the SWMP. Public education, outreach and involvement supports efforts by NDOT to protect the quality of stormwater runoff.
2. Illicit Discharge Detection and Elimination: NDOT has created a program with enforceable statutes that address policies and procedures for identifying, enforcing, tracking and cleaning up illicit discharges within the storm sewer system. NDOT coordinates information about responses to illicit discharges with a variety of agencies and jurisdictions to resolve illicit discharges.
3. Construction Stormwater Management: NDOT has developed, implemented, and enforces a program with enforceable statutes to reduce pollutants in stormwater runoff from construction activities. Erosion and sediment control design, SWPPP maintenance, site inspections and contract administration procedures reduce the risk associated with disturbing soil during the construction process.
4. Post Construction Stormwater Management: NDOT has developed, implemented and enforces a program with enforceable statutes that minimizes water quality impacts by requiring Stormwater Treatment Facilities (STF's) to be designed, constructed and maintained on new and re-development projects. NDOT minimizes the long-term impact of pollutants in highway runoff by treating stormwater before it discharges into waters of the state.
5. Pollution Prevention/Good Housekeeping: NDOT has created an operation and maintenance program with policies and procedures that minimize the impact of maintenance facility and highway facility operations on stormwater runoff.

This SWMP document satisfies the consolidated effort to address each MCM. The document includes a rationale statement for each MCM, description of each BMP, references to supporting documents, as well as the goals, frequencies, assignments, and evaluation and assessment criteria used by NDOT. The format of the document is consistent throughout and is written in a manner to satisfy specific wording of the NPDES permit. References and supporting documents are listed to clarify where the implementation details for each BMP can be located.

Annual reporting is also a requirement of the MS4 Permit. The annual performance of each goal is measured against the evaluation and assessment metric of each BMP to determine if the SWMP is effectively protecting stormwater quality. Finally, this document is made available for the public to view. It is posted on-line and may be requested through NDOT public documents request.

PUBLIC EDUCATION, OUTREACH, AND INVOLVEMENT DECISION PROCESS AND RATIONALE

The purpose of this MCM is to educate the target audience on the benefits of keeping pollutants from stormwater runoff from receiving waters. An informed target audience can make a reduction in the amount of stormwater pollutants that enter our stormwater systems. NDOT utilizes various media to communicate these strategies, called Best Management Practices (BMPs). NDOT focuses communication on the target audiences that implement BMPs. The internal target audience represents those involved in the development, review and implementation of BMPs listed in the SWMP. The external target audience represents individuals and groups that don't implement this SWMP, but can affect stormwater quality or share information with NDOT about stormwater runoff from highways and maintenance facilities.

This MS4 **Public Education and Outreach (PEO) Strategy** is a targeted approach to delivering education, training and public involvement and is tailored to target audiences and groups of individuals that may influence stormwater quality associated with state highway and maintenance facility runoff. By focusing on the target audiences described in this PEO Strategy, NDOT can best develop awareness of stormwater BMPs, increase knowledge about recommended and required BMPs, and develop skills for correctly implementing BMPs.

MS4 Permit Part 3.4.1.1.1 requires NDOT to defined goals and objectives of the program. NDOT has defined the following **PEO Strategy Goals**.

PEO Strategy Goal 1: Educate and train the target audience to follow recommended and required BMPs; and the steps the target audience can take to reduce stormwater pollution.

PEO Strategy Goal 2: Utilize a combination of NDOT appropriate strategies to reach target audiences that can implement stormwater BMPs.

PEO Strategy Goal 3: Inform the target audience about how to participate in environmental stewardship opportunities, review the SWMP, and report illicit discharges and other highway concerns.

PEO Strategy BMPs: The PEO Strategy Goals are supported by the PEO Strategy BMPs described throughout the SWMP. The following PEO Strategy BMPs provide details about how NDOT accomplishes PEO Strategy Goals.

BMP 1.1 Deliver stormwater education materials that are tailored, current and relevant to the SWMP.

BMP 1.2 Deliver stormwater training and events that are tailored, current and relevant to the SWMP.

BMP 1.3 Maintain public review, comment and input resources that support the SWMP.

BMP 1.4 Support public notification from the target audience about the SWMP and pollution problems impacting stormwater quality.

BMP 3.4 Deliver education about the impact of illicit discharges, common types of illicit discharges, and response procedures when illicit discharges are identified.

BMP 4.4 Deliver education about the impact of construction-related stormwater pollution, construction site erosion control, sediment control, good housekeeping practices, inspection and enforcement requirements.

BMP 5.2 Deliver education about planning and designing BMPs required to treat stormwater runoff from new and redevelopment projects.

BMP 6.3 Deliver education about the impact of highway and maintenance facility operation on stormwater quality, operation BMPs, and inspection and enforcement requirements.

PEO Strategy Defining Activities: The PEO Strategy BMPs are defined by a set of materials and efforts that NDOT maintains. SWMP tables define each BMP with descriptions, target audiences, messages, methods/resources as well as dates that materials were last provided and when they are next due. The tables for defining activities follow the same general format shown below.

Description	Target Audience	Messages	Methods/Resources	Last Provided	Next Due
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PEO Strategy Implementation Activities: The PEO Strategy BMPs are measured by a set of goals that NDOT implements. SWMP tables list the goals for the activity, a measure for evaluation and assessment as well as the reporting for annual performance that is compared against the evaluation and assessment targets. The tables for implementation activities follow the same general format shown below.

Goals:	Evaluation and Assessment:	Annual Performance:
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PEO Strategy Target Audiences: The quality of stormwater discharging to the state highway, storm drain system can be impacted by audiences that NDOT addresses. Education materials and outreach activities are tailored with each target audience in mind to effectively reduce the risk of stormwater pollution. Educating the target audience is expected to have a positive impact on stormwater quality by reducing the risk of discharging target pollutants.

The Primary Target Audience is characterized by a high level of responsiveness to NDOT. This group includes any individual or entity that NDOT places expectations upon with a high degree of confidence that those expectations will be met. Failure to meet NDOT expectations can have negative consequences upon the Primary Target Audience which increases the potential that education and outreach efforts will be effective. The Primary Target Audiences include:

- NDOT Staff including:
 - o Director and Deputy Directors
 - o CTAG Members
 - o Construction Engineers
 - o Design Engineers
 - o District Operations and Maintenance Managers
 - o Staff involved with O&M of the Highway Environment
 - o Construction project staff
 - o Staff involved with Maintenance managing FRCPs, and conducting FRCP inspections
- Construction Industry including:
 - o Association of General Contractors
 - o Construction project contractors
- Other Roadway Design Engineers

The Secondary Target Audience is characterized by a lower level of responsiveness to NDOT. The group includes any individual or entity that uses the state highway system or that can contribute stormwater and pollutants to the storm drain system from outside the NDOT right-of-way. NDOT has very little leverage over this group and places a low degree of confidence that expectations placed on this group will be met without reinforcement from other entities. The Secondary Target Audience only includes:

- General Public

MCM 1&2: BMP 1: STORMWATER EDUCATION MATERIALS

BMP RATIONALE: TO INCREASE TARGET AUDIENCE AWARENESS AND KNOWLEDGE OF STORMWATER POLLUTION AND BEST PRACTICES TO PROTECT WATER QUALITY.

1.1.1 Coordinate Public Education and Outreach strategies with stormwater education or outreach materials for distribution to target audiences that:

- (Permit 3.4.1.1.1) Defines the goals and objectives of the program (see Rationale above);
- (Permit 3.4.1.1.2) Defines the target audience;
- (Permit 3.4.1.1.3) Maintains appropriate messages relevant to a transportation MS4;
- (Permit 3.4.1.1.4) Defines resources and methods for distributing education and outreach materials to the target audience.

Reference:				Frequency:	
PEO Strategies listed below (Additional Public Education and Outreach strategies are listed in BMP 3.4.1, 4.4.1, 5.2.1, 6.3.1)				Review: Annually	
Description	Target Audience	Messages	Methods/Resources	Last Provided	Next Due
Website	General Public and all NDOT staff	Stormwater Program Information, Guidance Documents and Links	NDOT Website – Digital program summary, contact information, downloads and links.	2017	2018
Social Media	General Public	Basic Stormwater Awareness and Reporting	Twitter @NebraskaDOT	New	2018
IDDE Brochure - External	General Public	IDDE Reporting	Distributed to Rest Areas across the State.	New	2018
Digital Message Display – Rest Areas	General Public	Basic Stormwater Awareness and Reporting	NDOT Rest Area Digital Message Boards.	New	2018
Report:	{{Observations, recommendations, and/or changes made to program references during permit year}}				

1.1.2 Distribute stormwater education or outreach materials related to the impact of stormwater discharges on water bodies and steps that the target audience can take to reduce pollutants in stormwater runoff.

Reference:	MS4 Program File		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:	Evaluation and assessment:	Annual Performance:	
Administration: NDOT Website content describes the <ul style="list-style-type: none"> • IDDE Program • Construction Stormwater Program • Post Construction Stormwater Program • Good Housekeeping and Pollution Prevention Program. 	Material is current	{{Yes/No}}	
Administration: External IDDE Brochure distributed matches current IDDE Plan	Material is current	{{Yes/No}}	
Effectiveness: Stormwater message is shared on digital message display viewed at rest areas by traveling public once per year.	One message per year at rest area facilities with digital message displays	{{Number}} displayed at {{Number}} Rest Areas	
Effectiveness: Stormwater message is shared on social media viewed by general public once per year.	One message per year for all NDOT Twitter followers	{{Number}} for {{Followers}} followers	
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

MCM 1&2: BMP 2: STORMWATER TRAINING AND EVENTS

All training and events have been moved into MCM specific tables where PEO Strategies are referenced. Starting in 2018, specific information will no longer be included in this BMP. See MCM 3.4, 4.4, 5.2 and 6.3 for detail about stormwater training and events.

MCM 1&2: BMP 3: PUBLIC REVIEW, COMMENT AND INPUT RESOURCES

BMP RATIONALE: ENGAGE THE TARGET AUDIENCE IN A PROCESS TO REVIEW PROGRAMMATIC CHANGES THAT MAY AFFECT AGENCY OPERATIONS AND DOCUMENT CONSIDERATIONS AND CHANGES MADE.

1.3.1 Provide stormwater public involvement for planning and implementation of programs and activities related to the development and implementation of the SWMP that;

- (Permit 3.4.1.2.1) Provides notice of opportunities to review and comment on new MS4 permits and SWMP revisions drafted for the MS4;
- (Permit 3.4.1.2.2) Creates opportunities for the target audience to participate in the implementation of stormwater controls; and
- (Permit 3.4.1.2.3) Ensures that information about the permittee’s SWMP is available to the target audience.

Reference:				Frequency:	
PEO Strategies listed below				Review: Annually	
Description	Target Audience	Messages	Methods/Resources	Last Provided	Next Due
NDOT Directors Meeting	NDOT Director and Deputy Directors,	MS4 Program Status and Updates	Meeting with Directors	2017	2018
CTAG Meetings	See MS4 Program Organization Chart for CTAG Program Leads.	MS4 Program Status and Updates	Compliance Technical Advisory Group Meetings or Updates	2017	2018
DE and DCE Meetings	NDOT District Construction Engineers	MS4 Program Status and Updates	Meeting with District Construction Engineers	2017	2018
DE and DOMM Meetings	District Operations and Maintenance Managers	MS4 Program Status and Updates	Meeting with District Operations and Maintenance Managers	2017	2018
DEC Meeting	District Environmental Coordinators	MS4 Program Status and Updates	Meeting with District Environmental Coordinators	2017	2018
NDEQ Public Notice	General Public	NDOT MS4 Program Public Notice	MS4 Permit and SWMP Public Notice	2017	2018

AGC Meeting	Association of General Contractors	Construction Stormwater policies and specifications.	Coordination and knowledge-sharing between Association of General Contractors representatives and NDOT Roadside Development and Compliance (RDC) Unit staff	2017	2018
Project Public Meetings	General Public	Public Input on Department projects	Public Meetings for Construction Projects within MS4	2017	2018
..... Report:	{{observations, recommendations, and/or changes made to program references during permit year}}				

1.3.2 Provide public involvement and participation opportunities that demonstrate compliance with state and local public notice requirements and involves the public in planning and implementation of programs and activities of the SWMP.

Reference:	NDOT Project Files, MS4 Program File		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: NDOT Website content contains <ul style="list-style-type: none"> • Current NPDES MS4 Permit • Current SWMP Document • Most recent three years of Annual Reports 		Material is current	{{Yes/No}}
Administration: Coordinate public input meetings for projects located within the MS4 boundary areas to present information and to support comments from the public.		Meetings are provided	{{Yes/No}}
Effectiveness: Coordinate meetings to present SWMP information and encourage feedback from the Target Audience including: <ul style="list-style-type: none"> • Directors – Annually • Compliance Technical Advisory Group – Semi-Annually • District Engineers and District Construction Engineers – Annually • District Engineers and District Operations and Maintenance Managers – Annually • District Environmental Coordinator Meeting – Annually • Association of General Contractors Meeting – Annually 		Annually	Meetings: {{Number}} Total Attendance: {{Number}}
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

MCM 1&2: BMP 4: PUBLIC NOTIFICATION RESOURCES

BMP RATIONALE: EQUIP THE TARGET AUDIENCE WITH TOOLS TO SUBMIT INFORMATION ABOUT STORMWATER POLLUTION AND EFFORTS TO PROTECT STORMWATER QUALITY SO NDOT CAN TAKE APPROPRIATE ACTIONS TO PROTECT WATER RESOURCES.

1.4.1 Promote public reporting resources that allow the Target Audience to provide feedback about educational efforts, policies and projects and to submit details about pollution problems impacting stormwater quality such as illicit discharges (Permit 3.4.2.2.1).

Reference:				Frequency:	
PEO Strategies listed below				Review: Annually	
Description	Target Audience	Messages	Methods/Resources	Last Provided	Next Due
Web Form	General Public	General Public for pollution-related activities or incidents.	NDOT public website: Report Highway Environmental Concerns (new roads.nebraska.gov/contact-us/) (old transportation.nebraska.gov/report-concern.html)	2017	2018
General Phone Numbers	General Public	Contact information for General Public for pollution-related activities or incidents.	NDOT public General phone number (402-471-4567), fax number (402-479-4325) and TDD for hearing impaired (402-479-3834)	2017	2018
General Public Spill Reporting Numbers	General Public	Contact information for General Public for pollution-related activities or incidents.	NDEQ Spill reporting hotline phone number (402-471-2186) or (877-253-2603)	2017	2018
Emergency After Hours Reporting Phone Numbers	General Public	Contact information for General Public for pollution-related activities or incidents.	Emergency Concern external contact links: 911, State Patrol 24-Hour Dispatch (402-471-4545)	2017	2018
Report:	{{observations, recommendations, and/or changes made to program references during permit year}}				

1.4.2 Record stormwater management public input and requests for information submitted by the public.

Reference:	MS4 Program Files		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:	Evaluation and Assessment:	Annual Performance:	
Administration: Web and telephone resources are maintained throughout the year for access and use by the public.	Resources are current	{{Yes/No}}	
Effectiveness: A record of all formal stormwater management input provided by the public is documented.	100%	{{Percentage}} of {{Number}}	
Effectiveness: All formal stormwater records submitted by the public that require a response include the date of contact and response provided.	100%	{{Percentage}} of {{Number}}	
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

ILLICIT DISCHARGE DETECTION AND ELIMINATION DECISION PROCESS AND RATIONALE

The purpose of this MCM is to minimize the impact of illicit discharges to receiving waters within the MS4 boundary. An IDDE Plan is maintained by NDOT and is supported by state statutes to ensure identified illicit discharges are removed. Dry weather inspections of MS4 outfalls are performed to look for evidence of illicit discharges. Also, a storm sewer map is maintained to locate MS4 Outfalls that discharge into waters of the state. Finally, NDOT implements training strategies that equip staff to recognize, report and respond appropriately to illicit discharges.

NDOT has implemented an IDDE Plan since 2008. Spills along the travelled highway surface and in the rights-of-way are the most common type of illicit discharge that NDOT experiences. Because a spill's timing, substance and severity of impact on a transportation corridor is difficult to predict, planning for a consistent response can be problematic. NDOT typically is neither the first responder nor the primary point of contact for these types of events. Further, in some circumstances, NDOT may not be involved in the emergency response except to document that the incident was resolved. NDOT's basic involvement is limited to calling in the incident, recording the incident, providing traffic control if needed, and collecting information to ensure the spill is cleaned up and NDOT costs are recovered. NDOT works with State agencies such as NDEQ and the State Patrol who have jurisdictional responsibility to respond to spills along the state highway system. Local emergency responders are commonly involved when a situation warrants. This coordination is primarily completed not only to protect the safety of the traveling public, but also helps address the need to respond to and remove spills that may impact stormwater quality.

Other types of illicit discharges may occur, such as illegal dumping or flows through permitted or unpermitted stormwater conveyances. Illegal dumping is not common due to the nature of controlled access along state highways. NDOT staff is trained to look for evidence of illegal dumping and have it removed in a timely manner as they maintain the travelled surfaces and rights-of-way on an on-going basis. Finally, illicit discharges from permitted or unpermitted storm drain connections can occur. NDOT maintains adequate statutory control over the storm drain system within the MS4 boundary and these types of illicit discharges can be traced and reported back to an adjacent jurisdiction to investigate further and remove within their jurisdictional boundary and authority.

The land use context and operational procedures of state highway drainage system minimizes difficulty associated with tracing the source of an illicit discharge. As described above, the discharge is either a spill with a responsible party, an illegal dumping incident, or an illicit discharge from a permitted or unpermitted connection. The linear drainage system allows NDOT to quickly locate where the illicit discharge has entered the MS4 boundary once it has been identified.

Spills that occur on state highways are emergency situations. Removing the spill is required of the responsible party. Statute requires the responsible party to return the highway to its desired operational condition. If a responsible party cannot be identified from a spill or illegal dumping site, NDOT staff can lead in coordinating the removal of the substance. Illicit discharges from permitted or unpermitted connections originate from and require coordination with an adjacent jurisdiction. That adjacent jurisdiction leads the removal of the discharge and notifies NDOT when it is resolved.

Evaluation and assessment of the IDDE Program is described in the BMP tables for this MCM below. Each goal is established with an evaluation and assessment target. By reaching the target, NDOT is protecting stormwater quality to the maximum extent practicable. The following BMPs are established in support of the IDDE Program.

BMP 3.1 Conduct periodic dry weather screening of MS4 Outfall locations to look for evidence of potential illicit discharges.

BMP 3.2 Maintain investigation, removal and enforcement procedures to respond to illicit discharges effectively.

BMP 3.3 Maintain current maps of MS4 Outfalls and receiving waters located within the MS4 boundary.

BMP 3.4 Deliver education about the impact of illicit discharges, common types of illicit discharges, and response procedures when illicit discharges are identified.

MCM 3: BMP 1: DRY WEATHER SCREENING

BMP RATIONALE: ASSIGN AVAILABLE RESOURCES TO DETECT, INVESTIGATE, AND ELIMINATE ILLICIT DISCHARGES.

3.1.1 Maintain dry weather screening and data collection procedures and information for the Illicit Discharge Detection and Elimination (IDDE) Program, which documents:

- (Permit 3.4.2.1.3.1) Dry weather field screening methods and procedures for identifying sources of discharge that are to be used at MS4 Outfall locations;
- (Permit 3.4.2.1.3.2) Screening and source assessment procedures that list the minimum staff, equipment, and discharge evaluation process used;
- (Permit 3.4.2.1.3.3) Basis for selection of each dry weather field screening location; and
- (Permit 3.4.2.1.3.3) A current record of all dry weather field screening locations identified within the MS4 boundary.

Reference:	Frequency:
IDDE Plan	Review: Annually
Report:	{{Observations, recommendations, and/or changes made to program references during permit year}}

3.1.2 Conduct dry weather screening and record all results in outfall geodatabase.

Reference:	MS4 Outfall Geodatabase		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: Input all dry weather screening records collected for MS4 outfall locations into the outfall geodatabase within the current permit year.		Recorded	{{Yes/No}}
Effectiveness: All MS4 outfall dry weather screenings are completed at least once during the current permit year.		100%	{{%}} of {{Number}}
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

MCM 3: BMP 2: ILLICIT DISCHARGE INVESTIGATION AND REMOVAL

BMP RATIONALE: INVESTIGATE ILLICIT DISCHARGES IDENTIFIED SO ACTION CAN BE TAKEN BY THE RESPONSIBLE PARTY TO REMOVE AND/OR CLEAN UP.

3.2.1 Maintain investigation, removal and enforcement procedures for the NDOT MS4 Illicit Discharge Detection and Elimination (IDDE) Program, which defines and outlines the following:

- (Permit 3.4.2.1.4.1) Immediate reporting to NDEQ when dry weather flows are believed to be an immediate threat to human health or the environment;
- (Permit 3.4.2.1.4.2) Documentation of all investigations to track the date(s) that an illicit discharge was observed, results of investigation, follow-up of the initial investigation and the date that the investigation was closed;
- (Permit 3.4.2.1.5.1) Notifications to the responsible party and requirements for all necessary corrective actions to eliminate the non-stormwater discharge;
- (Permit 3.4.2.1.5.2) Interactions with potential responsible parties as well as follow-up investigations, when needed, to confirm illicit discharges have been removed; and
- (Permit 3.4.2.1.7 and .8) Communications related to illicit discharges observed flowing into or from an adjacent MS4 area.

Reference:		Frequency:
IDDE Plan		Review: Annually
Report:	{{Observations, recommendations, and/or changes made to program references during permit year}}	

3.2.2 Investigate and eliminate illicit discharges within and into the MS4 operated by NDOT.

Reference:	DIRK Reporting System		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: Record dates of all notifications, stakeholders involved, investigation and communication efforts, status and final resolution taken for illicit discharges.		Recorded	{{Yes/No}}
Administration: Map location of all documented illegal dumping and unpermitted connections identified.		Recorded	{{Yes/No}}
Effectiveness: Within 48 hours of notification of all confirmed illicit discharges, initiate investigation and/or notify adjacent MS4 operator if necessary to trace and remove source.		100%	{{%}} of {{Number}}
Effectiveness: Complete follow up inspection of all illegal dumping and unpermitted connections (potential for recurrence) within one year of resolving the occurrence.		100%	{{%}} of {{Number}}
Effectiveness: Summarize all instances closed without resolution including why the instance could not be resolved.		100%	{{%}} of {{Number}}
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

MCM 3: BMP 3: STORM SEWER SYSTEM MAPPING

BMP RATIONALE: FACILITATE GEOGRAPHIC INFORMATION NEEDED FOR DRY-WEATHER INSPECTION LOCATIONS, INVESTIGATION OF SOURCES OF POLLUTION IDENTIFIED AND REPORTED, AND PROTECTION OF DOWNSTREAM RECEIVING WATERS.

3.3.1 Maintain MS4 Outfall maps and references for the NDOT MS4 Illicit Discharge Detection and Elimination (IDDE) Program, which includes the following:

- (Permit 3.4.2.1.2.1) Geographic location of all MS4 Outfalls; and
- (Permit 3.4.2.1.2.2) Location of all state designated waters receiving direct discharges from MS4 Outfalls.

Reference:		Frequency:
IDDE Plan		Review: Annually
Report:	{{Observations, recommendations, and/or changes made to program references during permit year}}	

3.3.2 Maintain maps with current geographic locations of all MS4 Outfalls and state-designated waters within the MS4 boundary operated by NDOT.

Reference:	NDOT GIS Outfall Database, MS4 Outfall Maps		
Responsible:	Stormwater Coordinator	Frequency:	On-going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: Maintain MS4 Outfall attributes in GIS outfall database.		MS4 Outfalls are current	{{Yes/No}}
Administration: MS4 Outfall maps include location of all state-designated waters receiving direct discharges from MS4 outfalls.		State Designated Waters are current	{{Yes/No}}
Effectiveness: All existing MS4 Outfalls with modified characteristics are updated in the outfall database on an annual basis.		100%	{{%}} of {{Number}}
Effectiveness: New and modified MS4 Outfall locations are field verified within one year of MS4 limit change.		100%	{{%}} of {{Number}}
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

MCM 3: BMP 4: IDDE EDUCATION AND TRAINING

BMP RATIONALE: DISTRIBUTE INFORMATION THAT PROMOTES THE PROCESSES OF RECOGNIZING, RESPONDING TO AND DOCUMENTING ILLICIT DISCHARGES.

3.4.1 Maintain IDDE educational and training information with public education and outreach strategies to address:

- (Permit 3.4.2.3.1) Training for the target audience working within the MS4 boundary who, as part of their normal job responsibilities, may come into contact with or otherwise observe an illicit discharge or illicit connection to the storm sewer system; and
- (Permit 3.4.2.3.2) Schedule for training the target audience on the identification of an illicit discharge, and on the proper procedures for reporting and responding to the illicit discharge.

Reference:				Frequency:	
PEO Strategies listed below				Annual	
Description	Target Audience	Messages	Methods/Resources	Last Provided	Next Due
Operations Environmental Policies	NDOT staff involved with O&M of the highway environment	IDDE Policy and Procedures	Distributed to all MS4 facilities. Downloadable from website. Handout during District Environmental Training and FRCP Training.	New	2018
Vehicle Green Card	NDOT staff involved with O&M of the highway environment	Highway Illicit Discharge Procedure	Reference card located in NDOT vehicles outlining highway spill reporting procedure.	2017	2018
Comprehensive Operations Environmental Training - Part 3	NDOT staff involved with O&M of the highway environment	IDDE Policy and Procedures	On-line Training: Assigned first year of hire Reassigned every 3 years	New	2018
Report:	{{Observations, recommendations, and/or changes made to program references during permit year}}				

3.4.2 Distribute IDDE training and education to Department employees who, as part of their normal job responsibilities, may come into contact with or observe an illicit discharge in the MS4 area.

Reference:	MS4 Program File, EDC Employee Training System		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: Internal IDDE Brochure distributed matches current IDDE Plan		Material is current	{{Yes/No}}
Administration: Vehicle Cards distributed matches current IDDE Plan		Material is current	{{Yes/No}}
Administration: Formal operation environmental program training materials reflect the current IDDE program including response to highway spills and dumping.		Material is current	{{Yes/No}}
Administration: NDOT employees, who as part of their normal job responsibilities, may come into contact with or observe an illicit discharge or illicit connection to the MS4 completed training.		Number trained	{{Number}}
Effectiveness: All NDOT employees at maintenance facilities responsible for maintaining MS4 areas, who as part of their normal job responsibilities, may come into contact with or observe an illicit discharge to the MS4 complete training within one year of hire and every three years after.		100%	New {{%}} of {{Number}} Updated {{%}} of {{Number}}
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

CONSTRUCTION STORMWATER MANAGEMENT DECISION PROCESS AND RATIONALE

The purpose of this MCM is to reduce pollutants in stormwater runoff from construction activities according to the NPDES Construction Stormwater General Permit. Construction activity requires NDOT to plan, design, inspect and maintain BMPs for erosion control, sediment control and good housekeeping. These combined efforts help reduce pollution risks and manage discharges of construction-related stormwater runoff. NDOT oversees project planning and implementation processes to deliver the needed stormwater BMPs. These responsibilities are documented in the Construction Stormwater Plan. The Construction Stormwater Plan communicates, within NDOT, implementation details for stormwater design, permitting, inspection and compliance oversight. It enables BMPs listed in this MCM to be achieved.

Stormwater control measures are required by NDOT on projects that disturb at least one acre of soil by placing construction requirements into contract specifications. Clarity is a database used by NDOT to track the progress of completing the stormwater management design and permitting requirements. NDOT creates a Stormwater Pollution Prevention Plan (SWPPP) to satisfy the NPDES Construction Stormwater Permit. The SWPPP Template details stormwater control measures for erosion, sediment and non-sediment pollution sources for each project. Implementation of these control measures follows the specifications approved with the contract for the project. Leveraging NDOT contract specifications to require stormwater controls for erosion, sediment, and good housekeeping allows NDOT to be consistent with all contract administration aspects of construction projects.

The Construction Stormwater Plan describes the procedures NDOT follows to enforce erosion and sediment control compliance with the NPDES Construction Stormwater Permit or the contract specifications. If a formal noncompliance or violation occurs, the Construction Stormwater Plan describes the escalation steps followed to return the project to compliance. Public complaints about stormwater controls of individual projects may be formally submitted to NDOT and are addressed in the Construction Stormwater Plan as a corrective action or a formal noncompliance. Communication with the project manager or representative about stormwater concerns may be noted in the inspection reports, documented in SiteManager or passed on to be submitted as a formal complaint with NDOT.

Construction site inspections are the primary method NDOT utilizes to identify stormwater corrective actions and to document implementation of the SWMP. Inspector training is a high priority for NDOT and inspectors must maintain a valid inspector certification to inspect projects and oversee the installation of stormwater control measures. Qualified inspectors must be knowledgeable about the risk of stormwater pollution and how to communicate corrective actions that reduce the risk pollution can have on receiving water. Oversight inspections also help provide periodic compliance assistance for all projects located within the MS4 boundary. Inspection reports and corrective actions are documented and recorded in a database called ECODatabase which is also used to distribute notifications and reminders to take actions required for stormwater management.

Evaluation and assessment of the Construction Stormwater Program is described in the BMP tables for this MCM below. Each goal is established with an evaluation and assessment target. By reaching the target, NDOT is protecting stormwater quality to the maximum extent practicable. The following BMPs are established in support of the Construction Stormwater Program.

BMP 4.1 Prepare Stormwater Pollution Prevention Plans that implement erosion and sediment control requirements for construction sites with NPDES Permits.

BMP 4.2 Conduct routine and oversight construction site inspections to identify corrective actions needed to satisfy the SWMP and the NPDES Construction Stormwater Permit requirements.

BMP 4.3 Maintain enforcement procedures to respond to corrective actions, formal non-compliance and violations effectively.

BMP 4.4 Deliver education about the impact of construction stormwater pollution and procedures for design, inspection, and maintenance of erosion and sediment control BMPs.

MCM 4: BMP 1: CONSTRUCTION STORMWATER POLLUTION PREVENTION PLANS (SWPPPS)

BMP RATIONALE: REVIEW AND APPROVE DOCUMENTED PROCEDURES AND PRACTICES THAT WILL BE USED TO PROVIDE TEMPORARY AND PERMANENT SOIL STABILIZATION AND WATER QUALITY PROTECTION DURING THE CONSTRUCTION AND FINAL STABILIZATION PROCESS.

4.1.1 The Department will maintain construction SWPPP review procedures, that:

- (Permit 3.4.3.5.1) Ensure the SWPPP contains the erosion and sediment control and good housekeeping measures that meet the minimum NPDES general construction stormwater permit requirements for stormwater protection during construction activity;
- (Permit 3.4.3.5.2) Use qualified individuals, knowledgeable in the technical review of SWPPPS to conduct such reviews;
- (Permit 3.4.3.5.3) Document that SWPPP review procedures were completed; and
- (Permit 3.4.3.4.1, .2 & .3) Maintain an inventory of all construction activity authorized by NDEQ with contact and location information, date of NPDES authorization and a project tracking number.

Reference:	Frequency:
Construction Stormwater Plan	Review: Annually
Report:	{{Observations, recommendations, and/or changes made to program references during permit year}}

4.1.2 Develop, review and approve construction stormwater pollution prevention plans (SWPPP) for Department projects that will disturb at least one acre of soil surface alone or as part of a larger common plan of development or sale.

Reference:	Clarity Database, ECODatabase		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: Complete Design Activity: Roadside SWPPP Development.	100%		{{%}} of {{number}}
Administration: Complete SWPPP template for every stormwater permitted project each reporting year.	100%		{{%}} of {{number}}
Effectiveness: RDC Unit manager approves all NDOT Construction SWPPPs.	100%		{{%}} of {{number}}
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

MCM 4: BMP 2: CONSTRUCTION STORMWATER INSPECTIONS

BMP RATIONALE: CONDUCT SITE INSPECTIONS THAT DOCUMENT SITE CONDITIONS AND COMPLIANCE EFFORTS AND SUPPORT COMPLIANCE ASSISTANCE EFFORTS.

4.2.1 The Department will maintain construction SWPPP inspection procedures in the Construction Stormwater Plan, which defines:

- (Permit 3.4.3.6.1) Frequencies for inspecting construction activity as outlined in the NPDES general construction stormwater permit and verifying compliance with NPDES General Permit requirements;
- (Permit 3.4.3.6.4 & .5) Documenting, maintaining and tracking the number of inspection records;
- (Permit 3.4.3.6.6) Minimum requirements for qualified individuals, knowledgeable in the technical aspects of BMP installation and maintenance for construction inspections; and
- (Permit 3.4.3.6.7) Minimum requirements for conducting construction site inspections.

Reference:	Frequency:
Construction Stormwater Plan	Review: Annually
Report:	{{Observations, recommendations, and/or changes made to program references during permit year}}

4.2.2 Conduct site inspections for NPDES construction stormwater permitted construction projects and document compliance with construction stormwater BMP installation and maintenance requirements.

Reference:	ECODatabase		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: Scheduled construction stormwater inspections are conducted during reporting period.	Total number submitted	{{Number}}	
Administration: Compliance oversight construction stormwater inspections are conducted during reporting period.	Total number submitted	{{Number}}	
Administration: Vegetation establishment audits are conducted during reporting period.	Total number submitted	{{Number}}	
Effectiveness: Scheduled stormwater inspections are completed on average once every 14 days during construction and once every 30 days during establishment	100%	{{%}} of {{Number}}	
Effectiveness: Compliance oversight inspections are completed on average once every calendar year.	100%	{{%}} of {{Number}}	
Effectiveness: Vegetation establishment audits are completed before the Notice of Termination is submitted.	100%	{{%}} of {{Number}}	
Effectiveness: An investigation is completed by NDOT after a formal complaint is submitted by the public about stormwater management at an active construction site.	100%	{{%}} of {{Number}}	
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

MCM 4: BMP 3: CONSTRUCTION STORMWATER ENFORCEMENT

BMP RATIONALE: ISSUE TIMELY AND CONSISTENT ENFORCEMENT ACTIONS AND DIRECT THE TIMELY RESOLUTION OF CORRECTIVE ACTIONS, FORMAL NON-COMPLIANCE NOTICES AND VIOLATIONS AT CONSTRUCTION SITES.

4.3.1 Maintain enforceable authority within the Department by referencing state regulatory mechanism(s) including the following:

- (Permit 3.4.3.6.2) Procedures for taking necessary follow-up actions based on site inspection findings to ensure compliance;
- (Permit 3.4.3.6.3) Procedures for compliance oversight tracking;
- (Permit 3.4.3.6.7) Procedures for generating, maintaining and tracking compliance oversight documentation.
- (Permit 3.4.3.7.2) Procedures for receipt of project-related complaints submitted by the Public regarding construction stormwater activity.

Reference:	Frequency:
Construction Stormwater Plan	Review: Annually
Report:	{{Observations, recommendations, and/or changes made to program references during permit year}}

4.3.2 Conduct and record enforcement actions completed for construction stormwater corrective actions, formal non-compliance and/or violations.

Reference:	SiteManager, ECODatabase, MS4 Project File	
Responsible:	Stormwater Coordinator	Frequency: On-Going Annually
Goals:	Evaluation and Assessment:	Annual Performance:
Administration: Record each instance of NPDES permit corrective action, formal non-compliance notices and/or violations identified at construction sites.	Recorded	{{Yes/No}}
Effectiveness: An investigation and response is initiated within 48-hours after a formal complaint is provided to NDOT from the public regarding stormwater management at an active construction site.	100%	{{%}} of {{Number}}
Effectiveness: Records of unresolved formal non-compliance and/or violations are updated once every 14 days with status and any new information until issue is resolved.	100%	{{%}} of {{Number}}
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:	

MCM 4: BMP 4: CONSTRUCTION STORMWATER EDUCATION

4.4.1 Maintain construction stormwater educational and training information for distribution at a frequency according to the Public Education and Outreach Strategy, which references the following:

- (Permit 3.4.3.7.1.1) Information on existing training opportunities or training programs for construction operators on stormwater BMP selection, installation, implementation, and maintenance as well as overall program compliance; and
- (Permit 3.4.3.7.1.2) Outreach materials (i.e. Pocket guide, newsletters, website, etc.) aimed at educating the operators of construction activities.

REFERENCE:				FREQUENCY:	
PEO Strategies listed below				Annual	
Description	Target Audience	Messages	Methods/Resources	Last Provided	Next Due
Environmental Construction Stormwater Bulletins	NDOT construction project staff and construction project contractors	Stormwater/Erosion and Sediment Control BMP Guidance, Inspection and Maintenance Guidance, Training Announcements, Misc. Environmental Updates	Electronically Distributed bulletin. Also, available on NDOT website.	2017	2018
Pocket Field Guide	NDOT construction project staff and construction project contractors	Installation and Maintenance of Erosion and Sediment Control BMPs. Good Housekeeping BMPs, SWPPP and Stormwater Permit Information	Pocket-sized field guide distributed to all attendees at inspector training classes. Also, available upon request and downloadable from the NDOT website.	2017	2018
Erosion Control Inspector - Certification	NDOT construction project staff and construction project contractors	Stormwater Permit Compliance, Erosion and Sediment Control BMPs, Good Housekeeping/Spill Prevention, Inspection and Maintenance Procedures, SWPPP Implementation	Classroom Training Course offered a minimum of four (4) times per year. Certification is required to inspect or install/maintain BMPs on NDOT projects. Recertification required every 5 years.	2017	2018
Erosion Control Inspector - Recertification	NDOT construction project staff and construction	Stormwater Permit Compliance, Erosion and Sediment Control BMPs, Good	On-line Training Course. Recertification is required every 5 years.	2017	2018

	project contractors	Housekeeping/Spill Prevention, Inspection and Maintenance Procedures, SWPPP Implementation			
Erosion Control Inspector - Interim Certification	NDOT construction project staff and construction project contractors	Stormwater Permit Compliance, Erosion and Sediment Control BMPs, Good Housekeeping/Spill Prevention, Inspection and Maintenance Procedures, SWPPP Implementation	Interim Online Certification Course. Provides 6-month temporary certification. Can be used one time.	2017	2018
District Environmental Roundtables - Construction	NDOT construction project staff	Stormwater Permit Compliance, Erosion and Sediment Control BMPs, Good Housekeeping/Spill Prevention, Inspection and Maintenance Procedures, SWPPP Implementation	Interactive roundtable meeting provided at each District office in MS4 areas.	2017	2018
----- Report:	{{Observations, recommendations, and/or changes made to program references during permit year}}				

4.4.2 Distribute education materials and implement training related to construction stormwater pollution.

Reference:	MS4 Program File, LTAP Training Records, ECODatabase		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: Construction stormwater bulletins provided to construction site staff and operators.	Two bulletins distributed per year		{{Number}}
Administration: Construction stormwater BMP information is provided to construction site staff and operators.	Total number of pocket guides distributed		{{Number}}
Effectiveness: NDOT construction stormwater inspector certification is required every five years by Department construction project staff and construction project contractors involved in project inspections and directing installation of erosion and sediment control BMPs.	Total number of certification courses completed		Live Certification {{Number}} Live Recertification {{Number}} On-Line Recertification {{Number}} On-Line Interim Certification {{Number}}
Effectiveness: District Construction Environmental Roundtables provided at each District Office to review construction stormwater requirements and procedures..	100%		{{%}} of {{Number}}
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

POST CONSTRUCTION STORMWATER MANAGEMENT DECISION PROCESS AND RATIONALE

The purpose of this MCM is to include appropriate stormwater treatment BMPs on projects undergoing new development or redevelopment resulting in land disturbance of greater than or equal to one acre. This approach to roadway design addresses the on-going discharge of non-point source pollution from stormwater runoff after a project is complete. This MCM requires NDOT to plan, design, construct, inspect and maintain applicable stormwater treatment facilities. To accomplish this requirement, NDOT integrates stormwater treatment design into the roadway design process. These responsibilities are documented in the Post Construction Stormwater Plan. The Post Construction Stormwater Plan communicates, within NDOT, implementation details for stormwater treatment facility design, permitting, inspection and compliance oversight. It enables BMPs listed in this MCM to be achieved.

The Drainage Design and Erosion Control Manual (DDECM) was updated in 2012 with new design procedures and establishment of treatment standards. Chapter three of the DDECM outlines the design process and provides design guidelines for types of stormwater treatment facilities that may be included in the roadway design. Design forms have been adopted and incorporated into the design process to help NDOT Design Division staff determine if stormwater treatment is required and to provide the necessary documentation. Clarity is a database used to document that the design review steps have been completed for each project located in the MS4 boundary. The Roadside Development and Compliance (RDC) assists with project guidance of stormwater treatment requirements with roadway designers.

Training for NDOT staff and consultant designers has been important to raising awareness of requirements and equipping designers with the knowledge to satisfy the design procedures for stormwater treatment. Classroom training remains an effective method of delivering stormwater treatment design training and will continue to be provided as improved techniques are identified. Not all roadway designers work on projects that are located in the MS4 boundary. Making training available annually as staff transitions occur or new information is available to present is necessary. Informally reviewing project examples throughout the year with NDOT designers also supports the educational needs of NDOT.

Construction of new stormwater treatment facilities is underway and new treatment facilities will be located in the MS4 boundary over time. Stormwater Treatment Facility maintenance guides and inspection requirements are maintained by NDOT for each type of treatment facility. RDC will coordinate with maintenance staff responsible for each highway segment where stormwater treatment facility maintenance is required. ECODatabase is utilized to track inspections and corrective actions, and sends reminders when action is required.

Evaluation and assessment of the Post Construction Stormwater Program is described in the BMP tables for this MCM below. Each goal is established with an evaluation and assessment target. By reaching the target, NDOT is protecting stormwater quality to the maximum extent practicable. The following BMPs are established in support of the Post Construction Stormwater Program.

BMP 5.1 Maintain authority and compliance oversight procedures necessary to require stormwater treatment facilities to be designed, constructed and maintained on required projects.

BMP 5.2 Maintain and implement procedures necessary to facilitate planning and design of stormwater treatment facilities that will be constructed on required projects.

BMP 5.3 Maintain and implement inspection procedures necessary to evaluate and direct the maintenance of constructed stormwater treatment facilities.

5.1.1 Maintain enforceable authority and escalation procedures for the MS4 Post Construction Stormwater (PCSW) program with state regulatory mechanisms defining and enabling the following:

- (Permit 3.4.4.1) Stormwater treatment standards to be met for new development and redevelopment projects within the MS4 boundary that result in disturbance of one or more acres or that will result in a total land disturbance of less than one acre if part of a larger common plan of development or sale;
- (Permit 3.4.4.2.1) Minimum performance standards applicable to new development and redevelopment project designs; and
- (Permit 3.4.4.5.1) Resolution of corrective actions to restore the designed performance standard of inspected stormwater treatment facilities.

Reference:		Frequency:	
Post Construction Stormwater Plan		Review: Annually	
Report:	{{Observations, recommendations, and/or changes made to program references during permit year}}		

5.1.2 Implement compliance oversight procedures for permanent stormwater treatment facility requirements.

Reference:	ECODatabase		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: Record Stormwater Treatment Facility/Project, date compliance oversight initiated, reason for non-compliance or violation, date corrective actions are identified, nature of action required, date action was resolved or placed on capital expenditures log and final resolution of non-compliance with Post Construction stormwater treatment requirements.		Recorded	{{Yes/No}}
Effectiveness: Initiate investigation within seven (7) days of identification of potential non-compliance.		100%	{{%}} of {{Number}} Enforcements
Effectiveness: Unresolved records of corrective actions, non-compliance or violation are updated once every 30 days with current status and any new information until the issue is resolved.		100%	{{%}} of {{Number}} Records
Effectiveness: Summarize all instances of non-compliance or violation that were closed without resolution, including who made the determination to close the record and why the instance could not be resolved.		Record instances closed without resolution	{{Yes/No}}
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

5.2.1 Maintain design process review procedures for the MS4 Post Construction Stormwater (PCSW) program, which includes the following:

- (Permit 3.4.4.1.1 & .3) Documentation requirements for project plans to contain stormwater treatment facilities that meet the minimum performance standards for design, installation, implementation, and maintenance;
- (Permit 3.4.4.1.2) Assignment of qualified individuals, knowledgeable in the technical review of stormwater treatment design;
- (Permit 3.4.4.2.1.1) Inter-departmental consultations for design review and approval; and
- (Permit 3.4.4.2.1.2) Maintenance of as-built plan drawings after construction of a project.

Reference:				Frequency:	
Post Construction Stormwater Plan, PEO Strategies listed below				Review: Annually	
Description	Target Audience	Messages	Methods/Resources	Last Provided	Next Due
NDOT Stormwater Treatment Facilities - Design Guides	Department Roadway Designers and Consultant Designers.	Design guidance for NDOT Stormwater Treatment Facilities.	Design Guides referenced during Stormwater Treatment Design Class and available for download from NDOT website.	2017	2018
NDOT Stormwater Treatment Facilities - Maintenance Guides	Department staff involved with Maintenance Facility and Highway O&M. Adjacent MS4 Program Managers	Maintenance guidance for NDOT Stormwater Treatment Facilities.	Design Guides referenced during Stormwater Treatment Design Class and available for download from NDOT website.	2017	2018
Stormwater Treatment Design Class	Department Roadway Designers and Consultant Designers	Post Construction Stormwater Design Process (Chapter 3 of Drainage Design and Erosion Control Manual)	Live Classroom Training. Minimum 1 per year.	2017	2018
Report:	{{Observations, recommendations, and/or changes made to program references during permit year}}				

5.2.2 Conduct and record the status and Post Construction design process review effort for construction projects that will disturb at least one acre of soil alone or as part of a larger common plan of development or sale.

Reference:	Clarity Database, OnBase document management system		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: Stormwater Treatment Facility Design Guides match current policies.		Material is current	{{Yes/No}}
Administration: Stormwater Treatment Facility Maintenance Guides match current policies.		Material is current	{{Yes/No}}
Administration: Stormwater Treatment Facility Design training is made available for DOT Roadway Designers and consultant designers responsible for stormwater treatment facility design.		Stormwater Treatment Design training provided	Provided {{Number}} Attended {{Number}}
Administration: Complete post construction stormwater treatment Form A for every new development and redevelopment project within the MS4 boundary		Total number completed	{{Number}}
Administration: Complete post construction stormwater treatment Form B for every project required to consider post construction stormwater treatment based on Form A review.		Total number completed	{{Number}}
Effectiveness: Professional Engineer signs off that permanent stormwater treatment facilities meet NDOT design standards.		100%	{{%}} of {{Number}} STFs
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

5.3.1 Maintain site inspection procedures for the MS4 Post Construction Stormwater (PCSW) program, which references and defines the following:

- (Permit 3.4.4.3.1 & 3.4.4.5.1) Inspection methods to determine if performance standards are maintained for all installed stormwater treatment facilities;
- (Permit 3.4.4.4.1 & .3) Maintaining a current inventory, available for review by permitting authority, and map of stormwater treatment facilities within the MS4 Coverage Area;
- (Permit 3.4.4.4.2) Updating a stormwater treatment facility inventory where changes occur in property ownership or operation;
- (Permit 3.4.4.5.2) Inspection frequency for all installed stormwater treatment facilities;
- (Permit 3.4.4.5.3 & .4) Inspection report availability for review by the permitting authority.

Reference	Frequency
Post Construction Stormwater Plan, Stormwater Treatment BMP Maintenance and Inspection Guides	Review: Annually
Report:	{{observations, recommendations, and/or changes made to program defining documents during permit year}}

5.3.2 Conduct and record site inspections for new development and redevelopment projects to document stormwater treatment facility installation and maintenance compliance.

Reference:	ECODatabase		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:	Evaluation and Assessment:	Annual Performance:	
Administration: Record the total number of permanent stormwater treatment facility inspections conducted during reporting period	Total number recorded	{{Number}}	
Effectiveness: All complaints provided from the public about stormwater management of an approved STF leads to an investigation within seven (7 days) or a documented reason why an investigation was not conducted.	100%	{{%}} of {{Number}}	
Effectiveness: First inspections are completed within one year following closing of the project NPDES construction stormwater permit.	100%	{{%}} of {{Number}}	
Effectiveness: Inspections are completed annually after the first inspection following project close out.	100%	{{%}} of {{Number}}	
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

GOOD HOUSEKEEPING AND POLLUTION PREVENTION DECISION PROCESS AND RATIONALE

The purpose of this MCM is to prevent or reduce stormwater pollutant runoff potentially caused by NDOT operations and maintenance activities along state highways and maintenance facilities. Federal guidance for this MCM encourages the improvement of operation and maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural storm water controls. NDOT accomplishes the requirements of the BMPs described for this MCM by utilizing multiple Agency departments, establishes policies and procedures when required, and educates staff responsible for identifying, documenting and resolving issues that can result in stormwater pollution.

Two types of operations are reflected in the BMPs of this section. The first includes maintenance facilities that receive, store and maintain vehicles, equipment and materials. The other type is operation of the state highway system within the MS4 boundary. All maintenance facilities and all freeways of the state highway system are maintained by NDOT while State Statute designates maintenance of some portions of the State Highway System to be maintained and operated by the local jurisdiction.

Staff members that operate and maintain maintenance facilities and the state highway system take part in the comprehensive environmental training. On-line training courses are required of all staff at maintenance facilities located within the MS4 boundaries. In addition to on-line training, visits to District offices and individual maintenance facilities during the year are used to review stormwater compliance information and any changes to policies and procedures with staff members. More information about training and education is provided in BMP 6.3.

Implementation details for Good Housekeeping/Pollution Prevention requirements are documented in the NDOT Good Housekeeping Pollution Prevention Plan and the NDOT Maintenance Manual. The Good Housekeeping Pollution Prevention Plan directs implementation of stormwater BMPs at maintenance facilities and along the State Highway System. The Good Housekeeping/Pollution Prevention BMPs refer to functional maintenance activities and activity codes listed in the NDOT Maintenance Manual.

Oversight and direction for this program is led by staff in the Roadside Development and Compliance (RDC) Unit through close coordination with leadership in the Operations Division who participate in the Compliance Technical Advisory Group. This group gives direction to Facility Superintendents and Supervisors who provide support to their staff who are ultimately responsible for implementing the day-to-day activities required by the Good Housekeeping/Pollution Prevention program.

Every BMP listed in this Section includes measurable goals that NDOT implements. The Evaluation and Assessment measure provides a baseline that, when compared to the annual performance, will help communicate the success and effectiveness of the program toward protecting stormwater quality to the maximum extent practicable.

Evaluation and assessment of the Good Housekeeping/Pollution Prevention Program is described in the BMP tables for this MCM below. Each goal is established with an evaluation and assessment target. By reaching the target, NDOT is protecting stormwater quality to the maximum extent practicable. The following BMPs are established in support of the Good Housekeeping/Pollution Prevention Program.

BMP 6.1 Maintain and implement procedures to manage the risk of pollution from stormwater runoff at highway maintenance facilities.

BMP 6.2 Maintain and implement procedures to manage the risk of pollution related to operating and maintaining highway surfaces and stormwater drainage system.

BMP 6.3 Maintain and implement education and training intended to direct the reduction of stormwater pollution from highway maintenance facilities, highways and stormwater drainage system with appropriate inspections, best management practices and corrective actions.

MCM 6: BMP 1: NDOT MS4 FACILITY MAINTENANCE ACTIVITIES

BMP RATIONALE: EQUIP EMPLOYEES WITH RESOURCES AND TRAINING NEEDED TO MINIMIZE POLLUTANTS ASSOCIATED WITH MAINTENANCE FACILITY ACTIVITIES.

6.1.1 Maintain MS4 maintenance facility evaluation and maintenance procedures which define and direct the following:

- (Permit 3.4.5.1.1, .2 & 3.4.5.2.1) Assessment, listing and maps of all MS4 maintenance facilities, available for review by the permitting authority, which are subject to maintenance activity best management practice policies;
- (Permit 3.4.5.2.2) Process, criteria and frequency of risk assessment evaluation for MS4 maintenance facilities;
- (Permit 3.4.5.3.1 & .2) Development, storage and maintenance of current Facility Runoff Control Plans including stormwater control measures, inspection frequency, visual monitoring procedures, and schedules;
- (Permit 3.4.5.3.1.3) Provisions for general good housekeeping practices, storage of deicing materials, fueling operations, vehicle maintenance, and equipment and vehicle washing;
- (Permit 3.4.5.3.2.1 & .2) Routine and oversight inspections to evaluate pollution prevention measures; and
- (Permit 3.4.5.3.2.1 & .3) Records, available for review by the permitting authority, of completed inspections and related corrective actions.

Reference:		Frequency:	
Good Housekeeping and Pollution Prevention Plan		Review: Annually	
Report:	{{observations, recommendations, and/or changes made to program defining documents during permit year}}		

6.1.2 Conduct and record MS4 maintenance facility stormwater inspections and record results in a central database.

Reference:	ECODatabase, DIRK		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: Record the total number of maintenance facility environmental inspections conducted for each MS4 facility to include date corrective actions are identified, nature of action required, date action was resolved or placed on capital expenditures log.		Total number recorded	{{Number}}
Administrative: Record the total number of maintenance facility compliance oversight inspections conducted for all MS4 facilities to include review of capital expenditure log and pending corrective actions for the maintenance facility (6.1.2) and all MS4 highway facilities (6.2.2) maintained by staff from the facility.		Total number recorded	{{Number}}
Effectiveness: High priority MS4 maintenance facilities receive monthly maintenance facility environmental inspections.		100%	{{%}} of {{Number}} Facilities
Effectiveness: All corrective actions are addressed within 30 days or include documentation why action has not been completed with the next documented inspection.		100%	{{%}} of {{Number}} Corrective Actions
Effectiveness: Each facility receives at least one maintenance facility compliance oversight site inspection per year.		100%	{{%}} of {{Number}} Facilities
Effectiveness: All complaints provided from the public about stormwater management of an MS4 maintenance facility leads to investigation within seven (7 days) or a documented reason why an investigation was not conducted.		100%	{{%}} of {{Number}} Complaints
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

MCM 6: BMP 2: NDOT HIGHWAY ENVIRONMENTAL MAINTENANCE ACTIVITIES

BMP RATIONALE: EQUIP EMPLOYEES WITH RESOURCES AND TRAINING NEEDED TO MINIMIZE POLLUTANTS ASSOCIATED WITH HIGHWAY MAINTENANCE ACTIVITIES WITHIN THE MS4 BOUNDARY.

6.2.1 Maintain MS4 highway maintenance and stormwater drainage system evaluation and maintenance procedures which define and direct the following:

- (Permit 3.4.5.4.1.1 & .2) Inspecting and cleaning agency-owned inlets, open channels and other drainage structures for debris;
- (Permit 3.4.5.4.1.3) Disposing materials extracted from inlets so that stormwater drainage system waste material will not reenter the MS4;
- (Permit 3.4.5.4.2.1) Inspecting and sweeping agency-owned roadways.
- (Permit 3.4.5.4.2.2) Disposing materials extracted from street sweeping so that waste material will not reenter the MS4.

Reference:		Frequency:
Good Housekeeping and Pollution Prevention Plan		Review: Annually
Report:	{{observations, recommendations, and/or changes made to program defining documents during permit year}}	

6.2.2 Conduct MS4 highway stormwater inspections and record results in a central database.

Reference:	ECODatabase, Maintenance Crew Cards		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: Record the total number of MS4 highway facility environmental inspections conducted during the reporting period.		Total number recorded	{{Number}}
Effectiveness: Each highway segment receives a minimum of two highway stormwater highway facility environmental inspections per year by the assigned maintenance facility.		100%	{{%}} of {{Number}} Highways
Effectiveness: All corrective action records are resolved within 30 days or include documentation why action took longer than 30 days to resolve after being documented.		100%	{{%}} of {{Number}} Corrective Actions
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		

MCM 6: BMP 3: OPERATION AND MAINTENANCE PROGRAM ENVIRONMENTAL TRAINING

BMP RATIONALE: EQUIP EMPLOYEES WITH RESOURCES AND TRAINING NEEDED TO MINIMIZE POLLUTANTS ASSOCIATED WITH MAINTENANCE FACILITY ACTIVITIES.

6.3.1 Maintain training materials for distribution related to reducing stormwater pollution from municipal operation and maintenance activities in the Public Education and Outreach strategy, which defines the following:

- (Permit 3.4.5.5.1 & .3) Training program for the target audience involved in implementing pollution prevention and good housekeeping practices;
- (Permit 3.4.5.5.2) Personnel and tracking records of staff requiring training; and
- (Permit 3.4.5.5.3) Procedures for maintaining records of training completed.

Reference:				Frequency:	
PEO Strategies listed below				Annual	
Description	Target Audience	Messages	Methods/Resources	Last Provided	Next Due
Maintenance Bulletin	NDOT staff involved with Maintenance Facility and Highway O&M	Stormwater Pollution Prevention/FRCP Guidance	Electronically distributed and available on NDOT website.	New	2018
FRCP General Awareness Handout	NDOT staff involved with Maintenance Facility and Highway O&M	FRCP General Awareness	Distribute to all MS4 Facilities. Available on website.	2017	2018
Good Housekeeping Poster	NDOT staff involved with Maintenance Facility and Highway O&M	Facility Good Housekeeping Guidance	Poster distributed to all MS4 Facilities	2017	2018
Winter Maintenance Poster	NDOT staff involved with Maintenance Facility and Highway O&M	Facility Good Housekeeping Guidance	Poster distributed to all MS4 Facilities	2017	2018
Comprehensive Operations Environmental Training – Part 1	NDOT staff involved with Maintenance Facility and Highway O&M	Stormwater Pollution Prevention Practices, Procedures and Policies	On-line Training: Assigned first year of hire Reassigned every 3 years	New	2018

Comprehensive Operations Environmental Training – Part 2	NDOT staff involved with FRCP Implementation	FRCP Procedures and Policies	On-line Training: Assigned first year of hire Reassigned every 3 years	New	2018
FRCP Compliance Oversight Inspection/Training	NDOT staff involved with Maintenance managing FRCPs and conducting FRCP inspections	FRCP Implementation, Inspection Procedures	Facility Visit Training Handouts and Inspection Agenda/Attendance Record	2017	2018
District Environmental Maintenance Roundtable	NDOT staff involved with Maintenance Facility and Highway O&M	GHPP Program/IDDE Program Procedures and Policies	Interactive roundtable meeting provided at each District office in MS4 areas.	2017	2018
Report:	{{Observations, recommendations, and/or changes made to program references during permit year}}				

6.3.2 Deliver education and training related to pollution prevention and reduction from operation and maintenance activities conducted by department employees.

Reference:	MS4 Program File, EDC Employee Training System		
Responsible:	Stormwater Coordinator	Frequency:	On-Going Annually
Goals:		Evaluation and Assessment:	Annual Performance:
Administration: Maintenance stormwater bulletins are provided to operation and maintenance staff.		One bulletin distributed per year	{{Number}}
Administration: FRCP General Awareness Handout is provided to facility operation and maintenance staff.		Material is current	{{Yes/No}}
Administration: Facility Good Housekeeping Poster is displayed at operation and maintenance facilities.		Material is current	{{Yes/No}}
Administration: Facility Winter Maintenance Poster is displayed at operation and maintenance facilities.		Material is current	{{Yes/No}}
Effectiveness: All NDOT employees at maintenance facilities within the MS4 boundary complete the Comprehensive Operations Environmental Training Parts 1 and 2 within a year of employment and renew within three years of completion.		100%	New Staff {{%}} of {{Number}} Staff Renew Staff {{%}} of {{Number}} Staff
Effectiveness: Compliance Oversight Inspections/Training is provided annually at every maintenance facility with an FRCP required to be implemented.		100%	{{%}} of {{Number}} Facilities
Effectiveness: Maintenance Environmental Roundtable is provided annually at every District Office with MS4 areas to review GH/PP and IDDE requirements and procedures.		100%	{{%}} of {{Number}} District Offices
Satisfied:	Yes <input type="checkbox"/> No <input type="checkbox"/> Explanation:		