



PHASE II STORM WATER MANAGEMENT PROGRAM ANNUAL REPORT

for January 1, 2008 - December 31, 2008

Permit No. MI0057364

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Acronyms

The following acronym list is provided as a resource for those reading this report.

BMP – Best Management Practice
BOH IM – Bureau of Highway Instructional Memorandum
CSS – Context Sensitive Solutions
DIT – Department of Information Technology
IDEP – Illicit Discharge Elimination Program
MDEQ – Michigan Department of Environmental Quality
MDOT – Michigan Department of Transportation
MEA – Municipal Enforcing Agency
MEP – Maximum Extent Practicable
MPO – Metropolitan Planning Organization
MS4 – Municipal Separate Storm Sewer System
NPDES – National Pollutant Discharge Elimination System
PIPP – Pollution Incident Prevention Plan
SESC – Soil Erosion and Sedimentation Control
SWMP – Storm Water Management Plan
TMDL – Total Maximum Daily Load
TSC – Transportation Service Center
UA – Urbanized Area

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- Appendix B Illicit Discharge Elimination Program
- Appendix C Post Construction for New Development and Redevelopment
- Appendix D Pollution Prevention/Good Housekeeping
- Appendix E Construction Site Runoff Management

IMPLEMENTATION TEAMS/ACTIVITIES	2008	Status	Schedule
MDOT Sponsored Education and Outreach			
1. Litter Pick-Up		●	NA
2. Public Storm Water Web Site		●	NA
3. Public Appearances		●	NA
Public Involvement & Participation			
1. Training – Early Coordination		●	NA
2. Watershed Group and MPO Involvement		●	NA
3. Meet Responsibilities Established by TMDLs		●	NA
4. Conduct Early Coordination on Applicable Projects		●	NA
Illicit Discharge Elimination Program			
1. Outfall Labeling and Mapping		⊙	⊕
2. Dry Weather Screening		●	NA
3. Reported Illicit Discharges and Follow-Up		●	NA
4. Tap-In Permits		●	NA
5. Training – Illicit Discharge Awareness and Reporting		●	NA
6. Maintenance Garage Catch Basin Labeling		⊙	☀
Post Construction for New Development and Redevelopment			
1. Training – BMP selection and BMP maintenance		⊙	☀
2. Post Construction BMP Baseline Inspections and Review for Water Quality		⊙	☀
3. Post Construction BMP Selection		⊙	☀
4. Post construction BMP Maintenance		⊙	☀
5. Post Construction BMP Tracking/Mapping		⊙	☀
6. Review Standard Details and Specifications for Water Quality Improvement		⊙	☀
7. Develop Maintenance Performance Guides for Post Construction BMPs		●	NA
Pollution Prevention & Good Housekeeping			
1. PIPP Implementation		●	NA
2. Road Maintenance – Review Maintenance Contracts		⊙	⊕
3. Vehicle Spill Kits		⊙	☀
4. Pesticide Use		●	NA
5. Training – Minor Spill Clean-Up		⊙	☀
6. Training – Catch Basin Cleanout Procedures		⊙	☀
7. Training – Storm Water Guidance for Fleet Maintenance		⊙	☀
8. Road Salt/Sand Application		●	NA
9. Storm Water Management Guidance for Fleet Maintenance		⊙	☺

Status: Procedure/Program in Development = ⊙ Being Implemented = ●

Schedule: Ahead = ☺ On Schedule = ☀ Behind = ⊕ Not Applicable = NA

Construction Site Runoff Management		
1. SESC Program Review Process	●	☀
2. Training – Part 91 and Part 31	●	☀
3. Training – Pollution Prevention Practices on Construction Sites	●	☺
4. Training – Plan to Confirm Contract Counties are Trained	⊙	⊕
5. Construction Plan Review	●	NA
6. Special Provision on Non-Compliance	●	NA
7. Fertilizer Use	⊙	☺
8. Pollution Prevention Plan Reviews for Projects	●	NA

Status: Procedure/Program in Development = ⊙ Being Implemented = ●

Schedule: Ahead = ☺ On Schedule = ☀ Behind = ⊕ Not Applicable = NA

Overview

Introduction

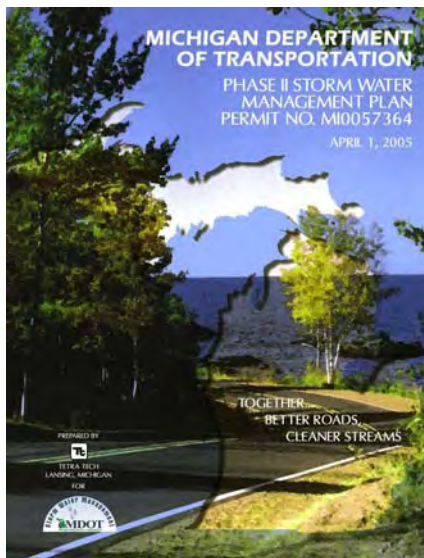
This Annual Report describes storm water pollution control activities implemented by MDOT over the past reporting period of January 1, 2008-December 31, 2008 to comply with reporting requirements described in the National Pollutant Discharge Elimination System (NPDES) Permit (No. MI0057364, hereinafter referred to as the Permit) issued by the Michigan Department of Environmental Quality (MDEQ). The Permit, which expires on April 1, 2009, is expected to be reissued in five year cycles thereafter.

The Permit directs MDOT to develop and implement a comprehensive Storm Water Management Program (SWMP) designed to reduce the discharge of pollutants from the MDOT drainage systems to the maximum extent practicable (MEP), protect the designated uses of the waters of the state, increase awareness of storm water as a potential source of pollutants, and satisfy the applicable state and federal water quality requirements.

Report Objectives

The objectives for this report are as follows:

- ◆ To inform MDOT Staff about SWMP activity accomplishments.
- ◆ To satisfy MDOT's annual reporting requirement of the Permit.
- ◆ To evaluate and assess the appropriateness and effectiveness of MDOT's SWMP.
- ◆ To present information about new programs, changes to current programs and procedures developed by MDOT.
- ◆ To document changes to MDOT's fiscal analysis and to summarize annual expenditures and budget information.



Report Organization

The annual report highlights actions MDOT completed or is working on to fulfill the Permit requirements during 2008. The reported information is organized by the six implementation teams responsible for the completion of storm water-related activities. The activities of the teams closely follow the requirements of the six minimum

measures of the Permit. The implementation teams include the following:

- ◆ MDOT-Sponsored Education and Outreach
- ◆ Public Involvement and Participation
- ◆ Illicit Discharge Elimination Program (IDEP)
- ◆ Post Construction for New Development and Redevelopment
- ◆ Pollution Prevention and Good Housekeeping
- ◆ Construction Site Runoff Management

MS4 Committee

During 2008, MDOT's Municipal Separate Storm Sewer System (MS4) Committee upon completion of their goal to develop and instigate procedures for the SWMP, was disbanded and replaced by a cross-functional mid-management level Storm Water Steering Committee responsible for overseeing the continued implementation of SWMP procedures on a broader scale throughout MDOT. The steering committee meets quarterly to discuss program goals and strategies.

Program Assessment

Program assessment is primarily determined by MDOT's adherence to the activities and measurable goals committed to in the SWMP as well as regular evaluation of storm water-related procedures, training, and programs.

As MDOT's Storm Water Management Program undergoes development and implementation, care is taken to ensure that MDOT's commitments, as written in the SWMP, are fulfilled; however, as the program flourishes, it sometimes becomes evident that modifications need to be made to the original activity, the measurable goal, or both. Detail regarding current activities, measurable

goals, and their assessment method are contained in the activity tables of this report which follow each implementation team summary. This includes Table 2, Table 3, Table 5, Table 7, Table 11, and Table 12.

Overall, MDOT is on schedule for fulfilling their commitments and the intent of their commitments by the end of the 5-year permit cycle on April 1, 2009. MDOT's vision is to have its Storm Water Management Program

be incorporated into the daily activities of the Department.

Revised Fiscal Analysis

No revisions were made to the fiscal analysis for this reporting period.

Annual Budget

Table 1 provides a summary of MDOT's past annual expenditures and estimated expenditures for fiscal year 2009. The fiscal year is from October 1st through September 30th of each year. Finalized budget information is also provided for FY 2008.

Table 1 Annual Storm Water Management Program Expenditure and Budget

Fiscal Year	Annual Expenditure
FY 1999	\$142,111
FY 2000	\$1,017,346
FY 2001	\$764,142
FY 2002	\$638,881
FY 2003	\$508,123
FY 2004	\$395,837
FY 2005	\$372,372
FY 2006	\$477,000
FY 2007	\$429,000
FY 2008	\$333,000
FY 2009*	\$500,000

* Budgeted amount for FY 2009.



MDOT-Sponsored Education and Outreach

Objective

To spread awareness of MDOT's Storm Water Management Program to MDOT staff, contractors, and the traveling public and to train MDOT staff and contractors on job-related expectations.

Training

Training in 2008 included IDEP training, soil erosion and sedimentation control training, pesticide applicator training and Storm Water Web Casts. The following details these trainings:

- ◆ IDEP Southwest Region maintenance staff
- ◆ MDOT Pesticide/Certification
- ◆ General Storm Water Management MDOT Maintenance Conference and Design Conference
- ◆ Soil Erosion and Sedimentation Control
 - Construction Conference
 - Various informal training sessions
- ◆ Public Presentations

MDOT also provided storm water educational materials and applicable display boards as handouts and exhibits, respectively, at various conferences and public events. The following summarizes these opportunities: (For more detail see Appendix A, *MDOT-Sponsored Education and Outreach*.)

Presentations

- ◆ Storm Water Presentation to Consultants

Display Exhibits & Handouts

- ◆ Kids Topics - Wayne County Libraries for the General Public
- ◆ IDEP and Post Construction BMP Topics Design Conference

Handouts and Promotional Materials Distributed

- ◆ Rouge River Fair
Various Events during 2008
- ◆ Lansing School District Career Night
- ◆ Take Your Child to Work Day

- ◆ Planning Seminar (MDOT Design Staff) - Storm Water Educational Materials

New storm water educational materials were developed in 2008 to increase awareness of MDOT's storm water program to MDOT staff AND contractors. As the targeted audiences become more aware of the program, it is MDOT's goal to transition that awareness to knowledge of expected participation in the storm water program, and then to behavior that supports the storm water program. This transition is expected to occur over many years.

The following materials were created in 2008 and were distributed at conferences and public events. (For more details see Appendix A.)

- ◆ Kids Retractable Tabletop Unit
August 2008
- ◆ Design Conference Display Boards
June 2008
- ◆ MDOT Advisories (Refer to discipline sections below for more detail.)
- ◆ Turkeyville Rest Area Rain Garden Sign - How rain gardens help reduce storm water pollution, 2008 Design, 2009 Installation
- ◆ Operation Care - 74 groups received Storm Water Brochures and trash bags for distribution to motorists at Rest Areas and Welcome Centers during the Memorial Day, Fourth of July and Labor Day Holidays. Approximately 1000 distributed statewide.

Other Agencies Borrowing MDOT Material

With many of the educational materials being posted on the MDOT Storm Water Public Web Page, MDOT has received several requests from other public agencies to use MDOT educational materials for their own reprinting and distribution. MDOT encourages usage of these materials and supplies the native graphic files when requested. The following is a list of agencies to which materials have been shared:

- ◆ U.S. Department of Defense and U.S. Army Corps of Engineers, *Dot the Drop Stormwater Animation*, Dec. 2008
- ◆ Alberta (Canada) Transportation Ministry, *Construction Site Soil Erosion & Pollution Prevention Pocket Guide and other educational materials*

MDOT Storm Water Public Web Page

<http://www.michigan.gov/stormwatermgmt>

The MDOT Storm Water Public Web Page is part of MDOT's Public Web Site and is updated on a quarterly basis. The page is dedicated to Phase II storm water information and provides a means for MDOT staff, contractors, and the traveling public to view and download MDOT's storm water materials, including reports and educational materials, and to link to other storm water-related Web sites. New information downloaded to the Web page this year includes the following:

- ◆ MDOT Rain Garden Web Page
- ◆ MDOT Storm Water Annual Report, 2007

Documentation of the number of Web page visits and downloads is located in Appendix A.

Storm Water Awareness Survey

In 2008, MDOT conducted a follow-up survey to the 2005 storm water awareness survey. See Appendix A for the results of the survey grouped by the main storm water-related division; Maintenance, Design, and Construction. The survey was web-based and 470 MDOT staff completed the survey with 262 respondents from the Maintenance, Design, and Construction divisions. Overall, it was difficult to make comparisons between the baseline and follow-up surveys due to lack of respondents within divisions in either the baseline or the follow-up survey. In the future, a mechanism other than voluntary employee survey should be identified to measure the effectiveness of various program activities. With the MDOT statewide storm water management program in place for five years, many employees now view it as a routine aspect of the Department's overall function. The survey does not therefore elicit the information needed to document a change in awareness.

Storm Water-Related Committees

The MDOT Storm Water Program Manager is involved with the following state and national committees in an effort to keep MDOT in the forefront of transportation storm water research and program development:

- ◆ Transportation Research Board, National Cooperative Highway Research Program (NCHRP) Panel member overseeing research into Evaluating and Selecting Modifications to Existing Roadway Drainage Infrastructure to Improve Water Quality in Ultra-Urban Areas
- ◆ Advisory panel member for the Stormwater Manager Practitioners' Handbook being developed by AASHTO through the Center for Environmental Excellence

- ◆ MDOT representative on AASHTO Standing Committee on the Environment (SCOE) which deals with road-related environmental issues including storm water
- ◆ MDOT representative to the AASHTO storm water managers

Litter Pick-Up Programs

MDOT continues to work with external groups for litter pick-up along their roadways. These groups include Adopt-A-Highway Program, Youth Corps, and cooperation with the Department of Corrections. In 2008, 5,800 roadway stretches were adopted and 70,359 trash bags were filled.

MDOT maintenance crews also conduct litter pick-up. Additionally, mowing contracts require contractors to pick up litter before mowing.

Focus for 2009

Entering into a new NPDES Phase II permit cycle in 2009, MDOT will continue with its existing educational program while at the same time taking a fresh look at how the program may be improved.

Measurable Goals & Assessment

Table 2 shows the activities associated with Public Education including measurable goals and the assessment method. Note that training activities are shown within the tables under the minimum measure most applicable.

MDOT Program Element: Public Education

Priority Issues/Pollutants of Concern: Litter

Pollution Sources: Traveling public within Michigan

Table 2 Public Education Activities

Activity Number	Activity	Program Goal	Measurable Goal	Timeframe	Assessment Method
PE-1	Litter Pick-Up	Minimize discharge of pollutants to water bodies from roadways, ROW, and parking lots.	Promote the MDOT Adopt-a-Highway program through signage and flyers.	By December 2008 [Completed]	Document number of adopt-a-highway stretches annually.
PE-2	Public Storm Water Web Site (E-3) ¹	Provide storm water information to MDOT staff, traveling public, and other government agencies.	Review and update the Web site semi-annually.	On-going	Track the number of Web site visitors and the number of downloads of key documents.
PE-3	Public Appearances (E-2)	Provide storm water information to the traveling public and other government agencies.	Provide MDOT storm water information such as litter bags, poster displays, etc. to agencies requesting the information.	On-going	Track the number of public appearances of MDOT information.

¹ Indicates the applicable activity name(s) as cited in the Storm Water Management Plan.

Public Involvement and Participation

Objective

To coordinate early planning of MDOT projects with local watershed organizations (Context Sensitive Solutions) and the Michigan Department of Environmental Quality (MDEQ) on environmental aspects.

Early Coordination Procedure

In 2008, there were no projects which triggered the early coordination procedure.

To help plan for early coordination in the future, a map was created identifying the locations of water bodies which may trigger early coordination on a project per the Early Coordination Procedure. These locations are overlaid by the locations of MDOT's 5-year transportation plan projects. The intersection of a project with a trigger location may indicate early coordination. The Early Coordination Procedure must be referenced to verify an actual trigger.

Environmental Review Database

MDOT began developing an Access database to help track the environmental review process for all MDOT construction projects.

Projects Affecting Waterways with Total Maximum Daily Loads

In 2008, three projects were reviewed for water quality concerns that may affect water bodies listed in the MDEQ 303(d), 305(b), and 314 Integrated Report. The water bodies include the following:

- ◆ Plaster Creek in Kent County
- ◆ Plaster Creek tributary in Kent County
- ◆ Douglas and Kelly Drains (tributaries to the Ecourse River) in Wayne County

Watershed Group Meetings

To help facilitate project coordination between MDOT and local watershed and environmental groups, region staff attend local watershed/environmental group meetings when appropriate and when possible. In addition, the MDOT Storm Water Program Manager receives and reviews meetings minutes from 15 to 20 watershed groups to ensure proper MDOT coordination when possible.

Alliance of Rouge Communities Meetings

The Alliance of Rouge Communities (ARC) is a voluntary public watershed entity currently comprised of 39 municipal governments and two counties (Wayne County and Washtenaw County). The ARC members represent public agencies with water management responsibilities whose jurisdictional boundaries are totally or in part located within the Rouge River watershed located in southeast Michigan. As a stakeholder in the Rouge River watershed, MDOT attends the biannual Full Alliance meetings to keep updated on watershed happenings and to ensure appropriate coordination of MDOT and ARC activities.

Focus for 2009

- ◆ Implement Environmental Review Database
- ◆ Continue attending watershed meetings
- ◆ Stay abreast of new developments in watershed management plans
- ◆ Use project planning public meetings as opportunities to share the goals and objectives of the MDOT Storm Water Management Program

Measurable Goals & Assessment

Table 3 shows the activities associated with Public Involvement and Participation including measurable goals and the assessment method.

MDOT Program Element: Public Involvement and Participation

Priority Issues/Pollutants of Concern: Sediment, Hydrocarbons

Pollution Sources: Roads

Table 3 Public Involvement and Participation Activities

Activity Number	Activity	Program Goal	Measurable Goal	Timeframe	Assessment Method
PIP-1	Training (T-1, C-4) ¹	Involve MDEQ-Water Bureau on all projects triggering the early coordination process.	Train 100% of appropriate region/TSC staff on completing the early coordination process.	By December 2008 [Completed in 2007]	Document those trained.
PIP-2	Watershed Group and MPO Involvement (C-2)	Invite watershed groups and MPOs to provide input on projects.	Distribute letters to MPOs and watershed groups inviting them to contact MDOT for input on projects using MDOT's 5-year plan.	Once every permit cycle	Compare watershed group involvement from year to year.
PIP-3	Meet Responsibilities Established by TMDLs (C-5)	Address projects which affect water bodies with TMDLs. Reduce pollutant loads as required.	Incorporate controls to address the pollutant of concern on 100% of projects affecting water bodies with a TMDL.	On-going	Document projects affecting TMDLs. Estimate theoretical pollutant load reductions.
PIP-4	Conduct Early Coordination on Applicable Projects (C-4)	Involve MDEQ-Water Bureau on all projects triggering the early coordination process.	<ul style="list-style-type: none"> Develop method to identify early coordination trigger locations. 	By December 2008 [Completed]	Document that method has been completed. Document the status of projects that trigger early coordination.
			<ul style="list-style-type: none"> Notify MDEQ of 100% of the projects which are triggered by the early coordination procedure. 	On-going	Document that early coordination procedure has been followed for each applicable project.

¹ Indicates the applicable activity name(s) as cited in the Storm Water Management Plan.

Illicit Discharge Elimination Program

Objective

To effectively implement MDOT's approved Illicit Discharge Elimination Program including dry weather screening of priority outfalls and a procedure for accepting and following through with reported illicit discharges/connections.

Dry Weather Screening

Initial dry weather screening at priority road-stream crossings as laid out in the SWMP has been completed. Three hundred and ninety-three (393) outfalls were identified at road-stream crossings and 389 of them were ruled as having no apparent illicit connections. The four remaining outfalls are pending further investigation as follows:

- ◆ 1 letter has been sent to the City of Southfield regarding a possible illicit connection near the intersection of M-102 and Lahser Road (Metro Region)
- ◆ 3 need letters sent to appropriate businesses and/or local agencies to continue illicit confirmation work as illicit connections are located outside of the MDOT right-of-way (ROW) (Metro Region) Still pending from 2007.

More details regarding dry weather screening investigations, such as sample analysis results and upstream tracking, are located in MDOT's dry weather screening database.

Reported Illicit Discharges

In addition to illicit discharges found during dry weather screening, illicit discharges were found by MDOT staff or outside sources and reported to MDOT. The status of these reports is as follows: (See Appendix B, *Illicit Discharge Elimination Program*, for reported discharges and correspondence.)

- ◆ August 1, 2007 – On US-12 during ditch cleanout operations black water with a sewage smell. – *Unresolved* (Southwest Region)
- ◆ August 8, 2007 – On M-43, an illicit connection was noted in a floor drain of the Maple Grove Bar, which drains to an MDOT structure. – *Unresolved* (Southwest Region)

- ◆ November 8, 2007 – On M-89, MDOT Maintenance during culvert cleaning near Slim's Stop-n-Go discovered petroleum sheen and odor when culvert ends were unplugged. – *Resolved* (Southwest Region)
- ◆ November 21, 2007 – On M-89, Calhoun County, Logan's Gas & Deli, pile of soil contaminated with gasoline-related compounds discharging into nearby MDOT storm sewer. – *Resolved* (Southwest Region)
- ◆ December 27, 2007 – City of Hastings at the Thornapple River and M-43 Road Crossing, sanitary sewer cross-connection from City of Hastings. – *Resolved* (Southwest Region)
- ◆ March 12, 2008 – On US-12, washing machine discharge into MDOT ditch. – *Resolved* (Southwest Region)
- ◆ April 3, 2008 – On Old US-31, pipe draining to MDOT ditch has an algal bloom and erosion at the discharge point. – *Resolved* (Southwest Region)
- ◆ April 17, 2008 – On M-40 near 36th Avenue, pipe emptying into MDOT ditch has an algal bloom at outlet. – *Resolved* (Southwest Region)

Legal Authority for Illicit Discharge/Connection Removal

There has been no change to MDOT's legal authority requiring illicit discharges/connections be removed from its drainage system.

Statewide Outfall Mapping

As required by MDOT's Storm Water Phase II NPDES Permit, MDOT has developed a statewide outfall map showing the locations of known MDOT outfalls. The outfalls were located based on 1) design-survey data and 2) GPS coordinates from the dry weather screening effort. The map is posted on the MDOT Storm Water Public Web Page and is organized by region and county. The map link is located on the "illicit discharge" page. The maps will be updated annually with the latest information and will continue to be posted on the Web site. It is the intent of MDOT to expand on these maps in coordination with the MDOT Asset Management group, which has an interest in the attributes of the outfalls as well.

Tap-in/Discharge Permit

MDOT distributes storm water educational material with its tap-in/discharge permit application. Entities

requesting to tap-in/dischARGE to MDOT's drainage system are required to obtain a permit. In 2008, 21 permits were issued and 201 annual statewide permit applications with educational information were distributed.

Outfall Labeling

MDOT has a special provision for labeling newly constructed storm water outfalls that discharge directly to the waters of the state from the MDOT drainage system. Note that in the future, these outfalls will be included on the statewide outfall map once the procedure for doing so is established.

Culvert Inventories

In 2008, MDOT began a program to inventory 83 counties within the MDOT ROW. Forty-one inventories were completed in 2008 in the Bay, Metro, North and Southwest Regions and the remaining culverts will be inventoried in 2009 in the Bay, Grand, Superior and University Regions. Table 4 shows a summary of the inventories conducted thus far:

Table 4 Culvert Inventories

Region	Number of Counties in Region	Number of Counties with Culvert Inventories Completed	Percentage Complete
Bay	13	5.5	42%
Grand	8	*	40%
Metro	4	4	100%
North	24	24	100%
Southwest	8	8	100%
Superior	16	0	0%
University	10	0	0%
Statewide	83	41.5	50%
* 100% of 2-lane roads and M-routes across Region			

Catch Basin Labeling

MDOT teamed up with the City of Benton Harbor, the Southwest Michigan Planning Commission, and Youth Corps to post decals on storm drains along M-139 between Business Loop 94 and Interstate 94 through Benton Harbor. This educational activity in coordination with brochures and informational packets was aimed at Berrien County residents to not dump anything down a storm drain. See Appendix B for a newspaper clipping from the South Bend Tribune.

Maintenance Advisory

In 2008, one Maintenance Advisory entitled Illicit Discharges (MA 2008-013) was distributed. The

advisory is a reminder and provides information on identifying and reporting illicit discharges/connections. See Appendix B for a copy of the advisory.

Focus for 2009

Entering into a new NPDES Phase II permit cycle in 2009, MDOT will continue with its existing IDEP activities and will re-evaluate procedures and training as appropriate upon issuance of the new permit.

Measurable Goals & Assessment

Table 5 shows the activities associated with the Illicit Discharge Elimination Program including measurable goals and the assessment method

MDOT Program Element: Illicit Discharge Elimination Program

Priority Issues/Pollutants of Concern: Hydrocarbons, *Escherichia coli*, Detergents

Pollution Sources: Outside MDOT Right-of-Way (ROW), Within MDOT ROW

Table 5 Illicit Discharge Elimination Program Activities

Activity Number	Activity	Program Goal	Measurable Goal	Timeframe	Assessment Method
IDEP-1	Outfall Labeling and Mapping (C-10) ¹	Identify MDOT's outfalls on a map and in the field.	<ul style="list-style-type: none"> ● Use the Special Provision for Labeling Storm Water Outfalls on all projects with an outfall as defined in BOH IM 2005-03, <i>Labeling Storm Water Outfalls</i>, . ● Document the coordinates of the outfall location for all projects with an outfall as defined in BOH IM 2005-03, <i>Labeling Storm Water Outfalls</i>. 	On-going	Document that new outfalls were checked for applicability as noted on checklist.
				By December 2008 [In progress]	Confirm that labeled outfalls are mapped.
IDEP-2	Dry weather screening (I-2)	Minimize discharge of pollutants to waterbodies from the MDOT drainage system.	Follow Section 9.13, <i>Illicit Discharges into MDOT Storm Water Drainage Systems</i> , of the Construction Permit Manual for outfalls at which the dry weather screening program confirms a pollutant discharge.	On-going	Track outfall correspondence and inspections in the IDEP reporting database.
IDEP-3	Reported Illicit Discharges and Follow-Up (I-3)	Minimize discharge of pollutants to waterbodies from the MDOT drainage system.	Follow Section 9.13, <i>Illicit Discharges into MDOT Storm Water Drainage Systems</i> , of the Construction Permit Manual for reported illicit discharges/connections.	On-going	Track outfall correspondence and inspections in the IDEP reporting database.

Illicit Discharge Elimination Program

Activity Number	Activity	Program Goal	Measurable Goal	Timeframe	Assessment Method
IDEP-4	Tap-In Permits (E-4)	Minimize discharge of pollutants to waterbodies from the MDOT drainage system.	<ul style="list-style-type: none"> ● Review educational materials for relevance and update as appropriate. ● Provide illicit discharge educational material to all permit applicants applying to discharge to the MDOT drainage system. 	Annually	Document any changes to educational materials.
				On-going	Track number of permit applications distributed.
IDEP-5	Training (T-1)	Minimize discharge of pollutants to waterbodies from the MDOT drainage system.	<ul style="list-style-type: none"> ● Inform appropriate staff annually on how to recognize and report illicit discharges/connections. ● Inform appropriate staff annually that outfalls need to be labeled and located with a coordinate. ● Inform appropriate permit staff annually that educational materials need to be included with the tap-in permit application. 	On-going	Document those trained.
				On-going	Inspections
				On-going	Incorporate educational materials into permit application.
IDEP-6	Maintenance Garage Catch Basin Labeling	Minimize discharge of pollutants to waterbodies from MDOT Maintenance Garages.	Install catch basin labels on an impervious surface at 100% of the maintenance garages statewide.	By December 2011	Include with annual maintenance inspections.

¹ Indicates the applicable activity name(s) as cited in the Storm Water Management Plan.

Post Construction for New Development and Redevelopment

Objective

To determine and implement the procedure for choosing post construction storm water BMPs, which may be structural, vegetative, or operational, as appropriate. The procedure includes coordination between environmental, design, construction, and maintenance staff early in project planning.

Post Construction BMP Baseline Inspection Pilot Study

In 2008, 17 MDOT post construction storm water BMPs were selected for field inspection and maintenance recommendations including detention basins, drop structures, and an infiltration basin. The field inspections included 1 site in the Southwest Region, 11 sites in the Metro Region, and 5 sites in the North Region. As part of the pilot study, a standard maintenance checklist was developed and used to document and track inspection findings and maintenance issues.

An example of a completed inspection form and report is included in Appendix C, *Post Construction for New Development and Redevelopment*.

Native Planting Demonstration Projects

MDOT has been awarded transportation enhancement funding for two native planting/water quality demonstration projects along two Michigan roads. One project is located at the Marshall Rest Area located on WB I-94 in Southwest Region and the other is located at the Alger Rest Area along SB I-75 in Bay Region.

The Marshall Rest Area native landscape consists of approximately 4.5 acres of drilled seed to be constructed in the spring of 2009. The majority of the planting is located on the eastern end of the site which receives the majority of the site drainage. The drainage from the rest area eventually outlets into the Rice Creek.

The Alger Rest Area, located on I-75 SB, will be planted in the spring of 2009 with native material over approximately 6 acres. The material is to be installed in the ditch areas of the ramps and parking lots as well as the western wooded portion of the site which is adjacent to Michigan Department of Natural Resources (MDNR) land. This property drains to a creek which flows under I-75 to the north of the rest area

The purpose of the native plantings is to achieve the following objectives:

- ◆ Determine if there is a reduction in future maintenance costs for the lowland portion of the rest area site when compared to standard turf establishment methods.
- ◆ Determine if native plantings provide increased absorption of potential contaminants such as salt and oil from the parking lot areas and filter contaminants out before the runoff enters the water body.
- ◆ Help to diffuse the spread of invasive species.

Research suggests that one benefit of using native plants versus traditional roadside vegetation is that the native plants in combination with uncompacted soil will reduce storm water runoff to the waters of the state. The native plants reduce discharge through their extensive root system, which promotes infiltration and evapotranspiration, and through their adaptability to the Michigan environment. MDOT will also be looking at maintenance requirements associated with these projects.

Post Construction BMP Recommendations

MDOT reviews all projects for their impact on water quality. In 2008, a total of 214 MDOT construction projects were reviewed with the majority (54%) of the projects located in the Metro, University, and Bay regions. Table 6 shows a breakdown of the number of projects reviewed for each region. In addition, 34 sites around the state were reviewed with special consideration due to their proximity to either Designated Trout Streams (17 sites) or Impaired Water Bodies (17 sites). A list of the sites inspected with special consideration is included in Appendix C.

Table 6 Water Quality Reviews for Projects

Rank	Region	No. of Projects	% of Projects
1	Metro	40	19
2/3	University	38	18
2/3	Bay	38	18
4/5	Grand	31	14
4/5	Southwest	31	14
6	North	20	9
7	Superior	16	7
	Total	214	100

Post Construction BMP Maintenance

As new post construction storm water BMPs are evaluated and approved by MDOT for regular use, a Maintenance Performance Guide will be developed. In 2008, maintenance performance guides were developed

for permanent check dams and detention/retention basins as described in the MDOT Drainage Manual. See Appendix C for copies of these guides. Maintenance Performance Guides are used by maintenance staff.

List of Post Construction BMPs

A list of post construction BMPs is being updated to help track the location and purpose of each MDOT post construction storm water BMP. See Appendix C for a copy of the list to-date. There are 87 structures currently listed many of which will be inspected over the next five years as part of the baseline inspection effort. Each MDOT region is asked to review and add to the current list of BMPs periodically as they become aware of existing BMP sites or new BMP sites are constructed.

Transportation Enhancement Fund Projects

MDOT manages the federal Transportation Enhancement Funds for Michigan and encourages grant applicants to include a water quality benefit within their project. Constructed Transportation Enhancement Fund projects in 2008 with a noted water quality benefit include the following:

- ◆ Isabella County – M-20 Storm Water outlet repairs and water quality
- ◆ Arenac County – Native plantings in Alger Rest Area
- ◆ Eaton County – Watson & Watson Outlet Drain Contract A
- ◆ Calhoun County – Native plantings in the I-94/I-96 interchange

Post Construction BMP Training Module Update

The Post Construction BMP Training Module was updated in 2008. The PowerPoint presentation targets designers and project managers and can be used for MDOT staff or consultants.

Design Advisory

In 2008, the MDOT Design Division developed a design advisory. The design advisory (DA 2008-01) was posted on April 29, 2008 about *Consideration of Soil Erosion and Sedimentation Controls (SESC) During Design*. This design advisory was developed to help designers evaluate several factors in SESC which include: (See Appendix C for a copy of the advisory.)

- ◆ Extent of earth disturbance on the project
- ◆ Soil types in the construction area
- ◆ Steepness and length of slopes

- ◆ Water resources on and adjacent to the project
- ◆ Staging and sequence of the construction activity
- ◆ Duration of the project
- ◆ Increase in impervious surface area

Focus for 2009

Entering into a new NPDES Phase II permit cycle in 2009, MDOT will continue with its existing Post Construction BMP activities and will re-evaluate procedures and training as appropriate upon issuance of the new permit.

Measurable Goals & Assessment

Table 7 shows the activities associated with Post Construction for new Development and Redevelopment including measurable goals and the assessment method.

Note: Due to increased emphasis on ARRA projects (stimulus) for 2009 and 2010, the timeframe for completion of activities with December 2009 completion dates has been extended until 2011.

MDOT Program Element: Post Construction for New Development and Redevelopment (4R Projects)

Priority Issues/Pollutants of Concern: Sediment, Hydrocarbons

Pollution Sources: Roads

Table 7 Post Construction for New Development and Redevelopment Activities

Activity Number	Activity	Program Goal	Measurable Goal	Timeframe	Assessment Method
PC-1	Training (T-1) ¹	Consider storm water runoff controls on projects.	<ul style="list-style-type: none"> • Inform 100% of appropriate region design staff on how to select post construction BMPs. • Inform 100% of appropriate region maintenance staff on how to maintain post construction BMPs based on the maintenance performance guides. 	By December 2009 [By December 2011] ²	Document those trained. Survey: Pre-training quiz results and post-training quiz results
				By December 2009 [By December 2011]	
PC-2	Post Construction BMP Baseline Inspections and Review for Water Quality Benefit (C-11)	Inspect all of MDOT's known post construction BMPs for overall maintenance needs and possible water quality benefit retrofits.	Inspect 20% of MDOT's known post construction BMPs (not swales or catch basin sumps) each year for five years.	By December 2012	Confirm inspections annually.
PC-3	Post Construction BMP Selection (C-3)	Implementation of appropriate post construction BMPs on priority projects.	<ul style="list-style-type: none"> • Follow Drainage Manual criteria for including and selecting post construction BMPs on projects. • Include a check for "Storm Water Post Construction BMP" on scoping checklist. 	By December 2009 [By December 2011]	Confirm that regions are using criteria and that it is documented.
				By December 2010	Document that checklist is developed.

Post Construction for New Development and Redevelopment

Activity Number	Activity	Program Goal	Measurable Goal	Timeframe	Assessment Method
PC-4	Post Construction BMP Maintenance (C-1, C-3, C-6)	Maintain post construction BMPs to provide a water quality benefit.	<ul style="list-style-type: none"> Annually, update a prioritized list of known post construction BMPs (not swales or catch basin sumps) needing significant maintenance. 	Annual	Confirm list is updated.
			<ul style="list-style-type: none"> Review results of baseline-inspected post construction BMPs for maintenance needs within 1 year of baseline inspection. 	On-going	Confirm review.
			<ul style="list-style-type: none"> Correct significant maintenance concern within 3 years of being on prioritized list. 	On-going	Confirm maintenance.
PC-5	Post Construction BMP Tracking/Mapping	Locate MDOT's Post Construction BMPs statewide.	Map 100% of MDOT's known post construction BMPs (not swales or catch basin sumps).	By December 2012	Confirm mapping.
PC-6	Review Standard Details and Specifications for Water Quality Improvement	Incorporate storm water runoff controls on projects.	Review Standard details and specifications related to hydraulics and recommend modifications to enhance water quality. Prepare special provisions and pilot modifications. Incorporate changes where practicable.	By December 2009 [By December 2011]	Document that details and specifications have been reviewed.
PC-7	Develop Maintenance Performance Guides for Post Construction BMPs	Maintain BMPs to provide a water quality benefit.	Develop a Maintenance Performance Guide for each of the post construction BMPs listed in the Drainage Manual.	By December 2008 [Completed]	Document that guides have been completed.
<p>¹Indicates the applicable activity name(s) as cited in the Storm Water Management Plan.</p> <p>²Due to increased emphasis on ARRA projects (stimulus) for 2009 and 2010, the timeframe for completion of activities with December 2009 completion dates has been extended until 2011.</p>					

Pollution Prevention and Good Housekeeping

Objective

To enhance current activities with the ultimate goal of preventing or reducing pollutant runoff from MDOT operations and properties.

Existing Pollution Prevention Practices

Many of MDOT's pollution prevention and good housekeeping practices have been in place at MDOT for many years and are described in facility Pollution Incident Prevention Plans (PIPP), procedure manuals, and guides maintained by the Maintenance Division and the Construction & Technology Division.

State Police Truck Inspections

Each year, the Michigan State Police (MSP) uses MDOT facilities (rest areas, weigh stations) to host their truck inspections. The truck inspections derive from federal safety requirements but also benefit water quality as some inspection protocols look for leaking fluids. There are several levels of inspections ranging from an extensive 30-point inspection to a simple driver certification check.

In 2008, 81,314 inspections were conducted across Michigan by the MSP and local law enforcement agencies certified by the MSP to perform the inspections. See Table 8 for an approximate break down of these inspections by region and the total including inspections performed by local agencies.

Table 8 State Police Truck Inspections

MSP Districts	Equivalent MDOT Regions ¹	2008 Total Inspections
1	University	11,092
2North	Metro	18,296
2South	University	13,475
3	Bay	8,487
5	Southwest	15,260
6	Grand	6,227
7	North	2,222
8	Superior	5,725
TOTAL		81,314*

¹ The MSP District boundaries and MDOT Regions do not match up exactly in the Bay, Grand, North, and University Regions. They differ by one or two boundary counties.

Pollution Incident Prevention Plan (PIPP) Audits

MDOT completed 38 maintenance facility audits in 2008. Consisting of a facility walk through and records review, these audits are conducted on a three year rotation. As part of the 2008 audits, all environmental-related files at the garages were reviewed and only the documentation required to be kept on file was retained on site. All unnecessary paperwork and environmental information were disposed of. Each facility was given an MDOT Maintenance Garage Environmental Manual in which to store current records pertaining to environmental training, environmental emergency spill response information, and the Pollution Incident Prevention Plan for the site.

Pesticide Applicator Program

Pesticides are applied on MDOT right-of-way in accordance with Applicator Certification Regulation 636 and Pesticide Use Regulation 637 of Part 83, Pesticide Control, of the Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended, (NREPA) and all other applicable state and federal regulations. These regulations require all applicators to be registered or certified to apply pesticides in the State of Michigan. MDOT requires all applicators to be certified if making roadside, guardrail, and brush pesticide applications on MDOT right-of-way. These applicators consist of MDOT, County and/or contractor personnel.

No changes were made to the existing Pesticide Applicator Program in 2008. Training was held on April 15-16, 2008 with 70 employees attending, and followed the same format as past years. The training is approved and attended by the Michigan Department of Agriculture (MDA). MDA will also issue recertification credits for the certified applicators.

Road Salt/Sand Application

MDOT tracks biweekly salt and sand usage from MDOT crews and contract agencies. A salt storage program is also in affect to assist contract agencies in updating their salt sheds. Salt and sand usage on state trunklines from October 2007 through April 2008 are shown in Table 9 and Table 10, respectively. It should be noted that it is difficult to make any year to year comparisons using the data due to variation in weather conditions and road conditions. See Appendix D, *Pollution Prevention/Good Housekeeping*, for more details regarding salt and sand application.

Table 9 Salt Usage

	Winter 2006-2007	Winter 2007-2008
Region	Salt Tonnage per Lane Mile	Salt Tonnage per Lane Mile
Superior	21.4	25.5
North	22.4	23.7
Grand	23.5	27.0
Bay	14.6	17.7
Southwest	20.0	21.5
University	15.3	24.3
Metro	21.0	32.3
Average	19.8	24.6

Note: Lane mile totals per region are within 10% from year to year.

Table 10 Sand Usage

	Winter 2006-2007	Winter 2007-2008
Region	Sand Tonnage per Lane Mile	Sand Tonnage per Lane Mile
Superior	9.5	9.1
North	7.3	7.2
Grand	4.1	4.1
Bay	0.0	0.0
Southwest	0.0	0.0
University	2.3	2.3
Metro	0.0	0
Average	3.3	3.2

Note: Lane mile totals per region are within 10% from year to year.

As discussed in the MITA Cross-Section, Winter 2007, MDOT is conscious of its salt and sand usage and tests new de-icing and anti-icing technologies to reduce salt and sand usage. These technologies include pre-wetting, surface overlay systems, and global positioning systems.

Roadside Maintenance Activities

MDOT's Maintenance Environmental Team is involved with maintenance activities that help prevent storm water pollution, such as street sweeping, catch basin maintenance, ditch clean out, culvert and underdrain maintenance, mowing, brush control, and bank stabilization. Depending on the location, MDOT's direct forces or local public agencies working under contract for MDOT will conduct these maintenance activities on a regular basis.

Catch basin cleaning, approach sweeping, and curb sweeping conducted by MDOT crews is tracked using the Maintenance Activity Reporting System (MARS). The Program Cost Accounting (PCA) details and costs are tabulated in Appendix D. Street sweeping and flushing, culvert/underdrain maintenance, and ditch clean-out activities for the contracted agencies are tracked using

Local Agency Payment System (LAPS) and are tabulated in Appendix D.

The culvert/underdrain maintenance activities include repair, removal, or replacement of catch basins, pipe culverts, pipe boxes, pipe headwalls, and underdrain tiles. \$1,649,647 were spent for roadside and general maintenance activities conducted by MDOT, including cleaning catch basins and sweeping approaches and curbs.

Local agencies reported \$6,387,529 spent for approximately 70,049 hours of activities. These activities included street sweeping and flushing of approximately 24,715 lane miles, maintaining approximately 17,778 lane miles of culverts and underdrains, cleaning out approximately 17,032 lane miles of ditches, and cleaning 22,931 lane miles of drainage structures.

Fertilizer Application

Fertilizer application is not currently regulated by the government. The application of fertilizer on MDOT right-of-way is typically done only on construction projects. These fertilizer applications are completed in accordance with MDOT's Standard Specifications for Construction, Section 816 and Section 917. There are very limited fertilizer applications made by MDOT Maintenance staff. No changes were made to the fertilizer specifications in 2008.

Maintenance Advisory

MA 2007-02 Catch Basin Cleaning

Maintenance Advisory (MA 2007-02) entitled Catch Basin Cleaning was issued at the very end of 2007 and was prompted by MDEQ guidance on catch basin cleaning operations. The advisory alerts MDOT Staff and contractors of updated Maintenance Performance Guides (Activity 12200, Catch Basin Clean-Out; Activity 13600, Curb Sweeping; and Activity 15300, Pump Station Maintenance) and summarizes the MDEQ guidance document. See Appendix D for a copy of the advisory.

MA 2008-07 Rest Area Lift Stations

Maintenance Advisory (MA 2008-07) entitled Rest Area Lift Stations was issued in December, 2008. The advisory instructs MDOT Rest Area Coordinators and Rest Area Attendants in proper maintenance requirements to prevent sewage backups and overflows at MDOT Rest Areas employing a lift station to handle raw sewage. The advisory also provides MDOT personnel with the proper reporting requirements in the event of an accidental discharge. See appendix D for a copy of the advisory.

MA 2008-08 Guidance for Storage of Empty Drums

Maintenance Advisory (MA 2008-08) entitled Guidance for Storage of Empty Drums was issued in December, 2008. The advisory addresses the problem of storing empty drums and offers guidance for ensuring that residual material from empty drums is kept out of groundwater and soil. Labeling of empty drums and disposal of un-useable drums is also addressed. See appendix D for a copy of the advisory.

MA 2008-09 Disposal of Used Motor Oil

Maintenance Advisory (MA 2008-09) entitled Disposal of Used Motor Oil was issued in December, 2008. The advisory presents guidelines for MDOT maintenance personnel regarding the storage and disposal of waste motor oil as well as the legal requirements for hauling and proper disposal documentation. See appendix D for a copy of the advisory.

Focus for 2009

Entering into a new NPDES Phase II permit cycle in 2009, MDOT will continue with its existing Pollution Prevention and Good Housekeeping activities and will re-evaluate procedures and training as appropriate upon issuance of the new permit.

Measurable Goals & Assessment

Table 11 shows the activities associated with Pollution Prevention and Good Housekeeping including measurable goals and the assessment method.

Note: Due to increased emphasis on ARRA projects (stimulus) for 2009 and 2010, the timeframe for completion of activities with December 2009 completion dates has been extended until 2011.

MDOT Program Element: Pollution Prevention and Good Housekeeping Program

Priority Issues/Pollutants of Concern: Sediment, Hydrocarbons, Chemicals

Pollution Sources: Roads, Maintenance Garages, MDOT Right-of-Way

Table 11 Pollution Prevention and Good Housekeeping Activities

Activity Number	Activity	Program Goal	Measurable Goal	Timeframe	Assessment Method
PPGH-1	PIPP Implementation (C-12) ¹	Minimize exposure of materials to rainfall. Prompt and appropriate clean-up of spills.	All MDOT fleet maintenance and storage facilities will have a PIPP.	By December 2008 [Completed]	Audit maintenance garages for compliance with PIPP. Follow-up on results.
PPGH-2	Road Maintenance (C-9)	Minimize discharge of pollutants to waterbodies from roadways and parking lots.	<ul style="list-style-type: none"> ● Review maintenance contracts and maintenance performance guides for inclusion of storm water activity updates. ● Inform contract agencies and MDOT Staff of changes to maintenance guides with the expectation that they begin new procedures within one year of notice. 	Every 3 years	Document that review was conducted.
				On-going	Random inspections by TSCs and regions.
PPGH-3	Minor Spill Clean-up	Minimize discharge of pollutants to waterbodies from roadways and parking lots.	Identify which vehicles should have spill kits for minor spills and provide each with a kit.	By December 2009 [By December 2011] ²	Audit fleet vehicles for spill kit. Follow-up on results.
PPGH-4	Pesticide Use	Minimize discharge of pollutants to waterbodies from roadways, ROW, and parking lots.	Train pesticide applicator staff as approved by the Michigan Dept. of Agriculture.	On-going	Document those trained. Inspection: MDA road checks.

Activity Number	Activity	Program Goal	Measurable Goal	Timeframe	Assessment Method
PPGH-5	Training (T-1)	Minimize discharge of pollutants to waterbodies from roadways, ROW, and parking lots.	<ul style="list-style-type: none"> ● Provide information to appropriate staff on minor spill clean-up procedures, as needed. ● Provide information to appropriate staff on catch basin cleanout procedures, as needed. ● Provide information to appropriate staff on storm water guidance for fleet maintenance. 	By December 2009 [Completed]	Document those trained.
				By December 2009 [Completed]	Document those trained.
				By December 2010	Document those trained.
PPGH-6	Road Salt/Sand Application	Minimize salt/sand usage for de-icing.	<ul style="list-style-type: none"> ● Calibrate MDOT salt trucks annually. ● Require contract agencies to calibrate their salt trucks annually. 	Annual	Document that each salt truck is calibrated.
				On-going	Document how this is required.
PPGH-7	Storm Water Management Guidance for Fleet Maintenance	Minimize discharge of pollutants to water bodies from roadways and parking lots.	<ul style="list-style-type: none"> ● Develop storm water management guidance for MDOT fleet maintenance facilities. ● Incorporate storm water management guidance into the PIPP for each MDOT fleet maintenance facility. 	By December 2009 [Completed]	Document that guidance is developed and distributed.
				By December 2010	Document that each facility has the guidance document.
<p>¹Indicates the applicable activity name(s) as cited in the Storm Water Management Plan.</p> <p>²Due to increased emphasis on ARRA projects (stimulus) for 2009 and 2010, the timeframe for completion of activities with December 2009 completion dates has been extended until 2011.</p>					

Construction Site Runoff Management

Objective

To enhance the current activities to effectively reduce pollution and accelerated soil erosion and resulting sedimentation on MDOT construction and maintenance projects.

Existing SESC Practices

Many of MDOT's soil erosion and sedimentation control procedures have been in place at MDOT for many years and are described in the MDOT SESC Manual, Construction Manual, and Standard Specifications for Construction maintained by the Construction & Technology Division. The Construction Manual and Standard Specifications for Construction are currently in the process of being updated.

SESC Program Review Process

MDOT is proceeding with the SESC Program Review Process. From now until the end of the permit cycle (April 1, 2009), each Transportation Service Center will be reviewed twice per the SESC Program Review Process. Beginning in 2009, the reviews will be triggered by the Engineer Certification Program (ECP) which will be on a three-year cycle.

Construction Advisory

In 2008, a Construction Advisory entitled Pollution Prevention on Construction Sites (CA 2008-06) was developed. This construction advisory serves to clarify good housekeeping practices on a construction site. The topics discussed in this construction advisory include: (See Appendix E, *Construction Site Runoff Management*, for a copy of the advisory.)

- ◆ Dumpsters
- ◆ Materials Storage Areas
- ◆ Sanitary Waste Facilities
- ◆ Equipment Maintenance and Refueling
- ◆ Diamond Grinding Slurry
- ◆ Concrete Washout Facilities

Training: Part 91 and Part 31 of Act 451

Pursuant to Part 91 of Act 451, MDOT has established procedures for soil erosion and sedimentation control, as detailed in the MDOT SESC Manual. Appropriate MDOT staff are trained and certified as required under Part 91. In 2008, 101 staff members were certified. MDOT utilizes Certified Storm Water Operators as

required under Part 31 of Act 451 and in 2008 16 staff members were certified.

Focus for 2009

Entering into a new NPDES Phase II permit cycle in 2009, MDOT will continue with its existing Construction Site Runoff Management activities and will re-evaluate procedures and training as appropriate upon issuance of the new permit.

Measurable Goals & Assessment

Table 12 shows the activities associated with Construction Site Runoff Management including measurable goals and the assessment method.

MDOT Program Element: Construction Site Runoff Management

Priority Issues/Pollutants of Concern: Sediment, Hydrocarbons, Concrete residual

Pollution Sources: Construction sites

Table 12 Construction Site Runoff Management Activities

Activity Number	Activity	Program Goal	Measurable Goal	Timeframe	Assessment Method
CON-1	SESC Program Review Process (C-7)	Have necessary SESC controls in place to prevent movement of sediment off-site or into waters of the state.	<ul style="list-style-type: none"> ● Reduce the incidences of erosion and sedimentation on projects that could lead to Notice of Violation letters. 	On-going	Document number of letters received.
			<ul style="list-style-type: none"> ● Discuss SESC at the preconstruction meeting at 100% of projects where this is applicable. 	On-going	Review pre-con meeting minutes for SESC discussion for active projects.
CON-2	Training (T-1), (T-3)	Increased understanding of SESC and pollution control alternatives.	Have 100% of MDOT staff responsible for administering Part 91 and Part 31 trained and certified.	On-going	Document those informed.
			Provide information on pollution prevention practices to 100% of MDOT staff responsible for administering Part 31 on construction sites.	By December 2009 [Completed]	Document those informed.
			Develop a plan to confirm, as needed, that contract counties are trained in SESC and pollution prevention controls during earthwork activities.	By December 2008 [In progress]	Document that a plan is developed.

Activity Number	Activity	Program Goal	Measurable Goal	Timeframe	Assessment Method
CON-3	Construction Plan Review	Have necessary SESC controls in place to prevent movement of sediment off-site or into waters of the state.	Conduct SESC plan reviews for 100% of earthwork or bridge projects.	On-going	Plan reviews: Document reviews and comments.
CON-4	Special Provision on Non-compliance	Ensure that contractors comply with SESC requirements.	Reduce the number of times it is necessary to enforce SESC through the special provision on non-compliance.	On-going	Document number of times special provision has been used.
CON-5	Fertilizer Use	Minimize discharge of pollutants to water bodies from ROW.	Review fertilizer use and application language in the Standard Specifications for Construction for storm water concerns.	By December 2010	Document changes to specification.
CON-6	Pollution Prevention	Minimize discharge of pollutants to waterbodies from ROW.	Conduct pollution prevention plan reviews for 100% of projects	By December 2008 [Completed]	Document that a plan is developed.