4. Construction Site Stormwater Runoff Control

Requirement:

The permittee shall continue to implement and enforce a program to reduce, to the maximum extent practicable, the discharge of pollutants from construction sites.

Performance/Measurable Goals:

A. Delegated Agency

The Department of Natural Resources and Environmental Control has delegated the authority to administer a sediment and stormwater program to DelDOT. The delegation is reviewed every three years. In 2009, DelDOT received delegation extension from DNREC through June 30, 2012. The components of the Delaware Sediment and Stormwater Regulations delegated to DelDOT are: review and approval of construction plans, review of construction sites, and inspection and maintenance of completed stormwater management facilities. Satisfactory performance of the delegated responsibilities will be considered compliance with this component of the SWPP&MP (see Annual Report 2003, Appendix F).

Enforcement of construction site erosion and sediment controls is accomplished through each construction contract. Section 110, Erosion, Sediment Control and Water Pollution, of the Delaware Department of Transportation Standard Specifications lays out a progressive step-wise approach to gaining compliance with approved plans, regulations, and laws. This section was significantly rewritten to demonstrate positive movement toward improving the Erosion & Sediment Program (See Annual Report 2007, Appendix F). The following items summarize the major changes:

1. Contractor required to provide CCR and must submit name at the time of bid and must conduct E&S reviews jointly with a member of DelDOT's construction staff.
2. Required pre-construction meeting specifically designed to address E&S compliance.
3. Better defined division of responsibilities among site reviewers, contractor engineer, project engineer, stormwater engineer
4. Strengthening of actions to gain compliance
5. Environmental Compliance Supervisor – new position at DelDOT to regularly track and review the construction site reviews submitted on a weekly basis from Notice of Intent (NOI) to Notice of Termination (NOT) and annually assess CCR's performance (Appendix D). The purpose of the Contractor Performance Evaluation Program is to better assure that CCRs considered for contract either possess, or will likely possess at the time contract performance is set to begin, all qualifications necessary to successfully complete the project on time. Getting the contractor CCRs to submit timely reports to DelDOT has been inconsistent. We therefore

determined that annual reviews may increase reporting compliance. The implementation of a mandatory, standardized system of evaluating CCR's performance is expected to yield consistency, objectivity, fairness, and accountability.

The CCR reporting form was changed as a result of our delegation review with DNREC. Added were slots for the plan expiration date, rain event box, and a page dedicated to Pollution Prevention. All uncorrected deficiencies must show a reason for remaining incomplete.

Additional/improved training on Clean Water Act, pollution prevention using common sense tactics, reporting, communication, posting NOI & Permits, etc. is being provided. DelDOT staff involved with erosion and sediment issues (E & S inspections, designing stormwater systems or review of stormwater plans) are required to complete DNREC's 3-day Certified Construction Reviewer (CCR) course.

DelDOT is also in the process of publishing a new, upgraded and updated version of its Erosion and Sediment Control Field Guide, which is made available to all DelDOT and contractor staff who install, inspect, and/or maintain construction BMPs. This field guide will be completed in 2010.

The Environmental Protection Agency (EPA) has instituted new turbidity effluent guidelines, and these are to be incorporated into the Delaware NPDES General Permit beginning in 2011. Construction sites that have greater than 10 acres of disturbed area will be required to maintain turbidity levels at, or below, 280 NTU for all storms events up to the 2-yr frequency. Owners/operators will be required to monitor the discharge from their sites to ensure compliance.

B. Inspection and Operation of BMPs

DelDOT has an annual obligation to inspect its constructed best management practice (BMP) devices, structures and stormwater management facilities. The purpose of this statewide program is to: (1) inventory, inspect, measure water quality performance, identify noxious and/or invasive species and maintain functionality of DelDOT's stormwater BMPs such as stormwater ponds, sand filters, bioswales, bioinfiltration trenches, etc., (2) maintain a comprehensive database, (3) coordinate with the Districts on the submittal of work orders as needed, and (4) provide technical assistance and guidance to the Department regarding appropriate maintenance strategies for stormwater BMPs.

A field inspection manual and forms were developed to effectively perform field inspections to evaluate BMP performance and identify maintenance requirements. The procedures outlined in this manual assist DelDOT with decisions on inspection, maintenance, repair, and retrofit of BMP facilities. Overall performance and functionality are graded A-D. Table 4-1 describes the BMP rating system used by DelDOT in 2009.

Annual BMP inspections are conducted throughout the state by KCI Technologies, under Agreement 1354. KCI inspected 326 BMPs in 2009. Table 4-2 shows the 2009 rating summary by each maintenance district.

C. BMP Maintenance

BMPs are evaluated and placed on contract for maintenance as money permits. Maintenance functions are performed by the Districts or through contractors specializing in noxious and invasive species control, or maintenance of specific BMP types. We executed a three year agreement with JCM Environmental to control noxious and invasive species.

Additionally, DelDOT executed a contract to conduct more major repairs on stormwater management facilities to include sediment excavation, slope stabilization, forebay and check dam construction, etc. We selected C and D rated BMPs with the goal of improving their rating to A. 15 BMPs in the state were maintained. Total expenditure was $366,246. We have budgeted an additional $400,000 for stormwater pond maintenance beginning in the spring of 2010.

Table 4-1. DelDOT's stormwater BMP rating system.

Rating	Description
A	**No Performance Issues** BMP with no issues affecting performance.
B	**Minor Maintenance** BMP with minor maintenance required; repaired by DelDOT Maintenance District or third-party invasives spray contractor.
C	**Major Maintenance** BMP with major maintenance required; repaired by third-party contractor, with oversight by DelDOT NPDES Engineer.
D	**Retrofit** BMP with retrofit requirements; BMP is failing; needs to be redesigned or rebuilt with input from DelDOT Stormwater Quality Program.

Table 4-2. 2009 BMP Inspection Ratings Summary**.**

BMP TYPE	TOTAL NO.	A	B	C	D
NORTH DISTRICT	**134**	27	25	81	1
CANAL DISTRICT	**102**	40	35	26	1
CENTRAL DISTRICT	**38**	15	10	12	1
SOUTH DISTRICT	**52**	41	9	2	0
TOTAL NO.	**326**	**123**	**79**	**121**	**3**