

NCHRP 20-68A – “US Domestic Scan Program”

Scan 08-03 Best Practices in Addressing NPDES and Other Water Quality Issues in Highway System Management.

Description of Scan

Non-compliance with NPDES permits can impact project design, engineering and construction schedules and increase construction time and costs. Successful implementation and compliance with NPDES permits requires the appropriate transfer of information and accountability through multiple phases of project delivery. State DOTs that are under NPDES Municipal Separate Storm Sewer System (MS4) Phase I coverage are anticipating implementation of the total maximum daily load (TMDL) process and this poses potential storm water permitting concerns based upon the method of implementation chosen and the types of impairments addressed.

Evidence from discussions at group meetings of state DOT’s suggest that many states are having trouble with erosion/sediment control or are reacting to violations stemming from erosion/sediment control problems on their construction projects. As such, it would benefit many DOT’s to study this issue and understand what actions can help increase compliance.

This scan will consider the perspectives of both environmental protection and transportation agencies in identifying effective practices for ensuring compliance with regulations and achieving broader objectives. Specifically, this scan will examine items such as:

- TMDL modeling,
- Water quality traditional and innovative best management practices (BMPs)
- Construction techniques and materials being used ,
- Agency maintenance and operations practices
- Coordination with local and federal regulators specifically regarding agreements, processes, and tracking compliance,
- Watershed land use management,
- Water quality credit trading,
- Management options other than structural BMPs (i.e., street sweeping, deicing chemicals, trash removal, nutrient management plans),
- Handling of hazardous spills,
- Agency compliance strategies,
- Funding,
- Program compliance reporting and tracking.

Benefits of this scan would be better insight to the project delivery process, improved compliance with NPDES permits, and reducing project delays associated with NPDES violations and noncompliance. It is anticipated that findings will also result in saving resources as a result of innovative initiatives and improved public image for transportation agencies. The scan will provide an excellent opportunity to document lessons learned and share experiences to assist individual DOTs in negotiating, developing, implementing and tracking TMDL programs as part of NPDES MS4 compliance.

Original Scan Proposal Title:

1. Best Management Practices In NPDES Permit Compliance In Project Delivery
2. Policy, Method, And Mission. Solving Water Quality Compliance Problems At State DOT’s
3. Readiness To Face Total Maximum Daily Loads (TMDLs) In National Pollutant Discharge Elimination System (NPDES) Compliance

Last Reviewed/Revised October 26, 2010

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Execution Schedule

Milestone	Anticipated Date
Chairs and Team Members Identified	December, 2008
Desk Scan Completed	April, 2009
Prescan Meeting Held	March, 2009
Scan Conducted	July, 2009
Draft PowerPoint submitted by SME	September, 2009
Draft Report Delivered to NCHRP and Panel	October, 2009
Final Report Delivered to NCHRP	April, 2010

Estimated Scan Cost and Funding

Actual cost and duration: \$ 139,400; 2 week

Last Reviewed/Revised October 26, 2010