AASHTO and FHWA

- GABRIEL WEIL, American Association of State Highway and Transportation Officials
- SUSAN JONES, PE, Federal Highway Administration
- MARCEL TCHAOU, PE, Federal Highway Administration
Web Forum Topics

- **Web Forum 1:** Water Quality affecting the project delivery process - post-construction treatment BMPs, Low Impact Development. *December 8, 2015 – available on CEE website:* [http://environment.transportation.org/](http://environment.transportation.org/)

- **Web Forum 2:** Stormwater and DOT construction projects - lessons learned and process improvements on temporary construction BMP practices and administrative processes. *Presenting now.*

- **Web Forum 3:** DOT Stormwater Program Organizational Structure - how best to manage Stormwater Requirements. *Tentative March 17, 2016, 11:00 a.m. Eastern*
Community of Practice Presenters

- **BARRY FAGAN**, PE/PLS, CPESC, CMS4S, CESSWI
  Environmental Program Engineer
  Alabama Department of Transportation

- **ROB SHREEVE**
  Deputy Director
  Maryland State Highway Administration

- **GABE ROBERTSON**
  Highway Stormwater Specialist
  Nebraska Department of Roads

- **SCOTT TAYLOR**, PE, D.WRE, F.ASCE
  Facilitator, AASHTO Stormwater Community of Practice
  Michael Baker International
Community of Practice Forum Overview

- **DOT Construction Stormwater Program Effectiveness**
  - Barry Fagan, Alabama Department of Transportation

- **Erosion and Sediment Control Program**
  - Rob Shreeve, Maryland State Highway Administration

- **Inspection and Tracking Program**
  - Gabe Robertson, Nebraska Department of Roads

- **Stormwater Community of Practice Forum Collaboration**
  - From the drop down, submit your questions to “Host & Presenter” by typing in the Q&A box on the WebEx panel on your screen.

- **Closing**
DOT Construction Stormwater Program Effectiveness

Barry Fagan, PE/PLS, CPESC, CMS4S, CESSWI
Environmental Program Engineer
Alabama Department of Transportation
The Compliance Paradox
Environmental Program vision:
an integrated environmental culture...
DOT’s mission:

To provide a transportation system...
DOT mission

environmental responsibilities
managing the symptom - sediment
managing the source - erosion

A = R K LS C P
A = sediment yield

tons/acre/year
managing the cause - water

Doubling the velocity of runoff...

- Increases erosive energy by 4x
- Increases the size of particle carried by 64x
- Increases the mass of soil that can be transported by 32x

...clean water in, clean water out...
managing implementation - work
EVOLUTION – The Five Pillars

Effectiveness ➔ COMMUNICATION
Implementation ➔ WORK
Cause ➔ WATER
Source ➔ EROSION
Symptom ➔ SEDIMENT
managing for effectiveness – preconstruction communication
managing for effectiveness – construction communication
managing for effectiveness –
post construction communication
DOT Construction Stormwater Program Effectiveness
Office of Environmental Design (OED)
Office of Construction (OOC)
Highway Hydraulics Division (HHD)
Plan Review Division (PRD)
SHA’s Construction Oversight

Key Program Elements -

Design
- ESD to the MEP
- Constructability
- Maintenance and Operations

Education
- SHA ESC Certification Training Program
- ESC Field Guide

Policy Development and Tools
- Quality Assurance Inspection - Rating System
- Incentive/Liquidated Damages
- Tool kit
- Performance-based Measurement
- Bi-weekly Inspections and day after rain event
- Cooperative Action among SHA, MDE, MTBMA

Research
- Study of Flocculants
- New Products Evaluation
Highway Hydraulics Division (HHD)

Teams in HHD

- Each team within HHD providing project engineering design and permit coordination services

- The Division is divided into six teams. Each team provides design, review and construction support for roadway drainage, SWM and ESC

- In addition, each team has a specialty focus
### Highway Hydraulics Division (HHD)

#### Specialty Focus of HHD Teams

<table>
<thead>
<tr>
<th>Christie Minami</th>
<th>Glen Helms</th>
<th>Abdul Wakil</th>
</tr>
</thead>
<tbody>
<tr>
<td>• District Projects Reviews</td>
<td>• Project Planning Support</td>
<td>• Drainage Standards</td>
</tr>
<tr>
<td>• MDE/PRD Coordination for SWM/ESC approval</td>
<td>• Major Projects Support</td>
<td>• Shop Drawings Review &amp; Approval</td>
</tr>
<tr>
<td>• ESC Training Certifications</td>
<td>• CDD Projects Support</td>
<td>• Major Project Support</td>
</tr>
<tr>
<td>• ESC Incentives &amp; Liquidated Damages Determination</td>
<td>• ICD Projects Support</td>
<td>• Drainage Assessments &amp; Investigations</td>
</tr>
<tr>
<td>• ESC Construction Modifications Review</td>
<td>• Drainage Improvement Projects</td>
<td>• Emergency &amp; Rapid Response Investigations</td>
</tr>
<tr>
<td>• Water Quality Bank Management</td>
<td></td>
<td>• District Maintenance Support</td>
</tr>
<tr>
<td>• Design Criteria, Specifications, and Guidance</td>
<td></td>
<td>• Stream Restoration/Outfall Stabilization</td>
</tr>
<tr>
<td>• NPDES CA Permits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Specialty Focus of HHD Teams

### Jonathan Brown
- Drainage & SWM Remediation Projects
- Drainage Improvement Projects
- Outfall Stabilization
- Major Dams Inspections Program
- Water Quality Bank Projects
- MS4 SWM Facility Remediation and Retrofit Projects

### Kiona Leah
- Drainage Improvement (Fund 74) Projects
- Major Projects Support
- CDD Projects support
- SWM & Drainage Asset Management SWM Facility Inspections,
- TMDL Program Support – technical review

### Vacant
- MS4 SWM Facility Remediation and Retrofit Project
- TMDL program Support – technical review
- Programmatic Outfall Stabilization
- Stream Restoration
- Drainage Improvement Projects
- District Maintenance Support
MARYLAND STATE LEGISLATION PASSED
Effective October 2013
HOUSE BILL 97 – Authorizing the Maryland Department of the Environment to designate authority for specified sediment control plan and stormwater management plan review and approval

MEMORANDUM OF UNDERSTANDING – SHA/MDE
Effective February 2015
Specifies Regulatory Responsibilities, Program Details, Administrative and Technical Procedures, Compliance Oversight Responsibilities

Pursuant to Maryland Code Ann., Environment Article, Title 4, Subtitle I, Sediment Control and Title 4, Subtitle 2, Stormwater Management, the Department has the authority to delegate its plan review and approval responsibility for State and federal projects to a designated entity. Under this MOU, MDE has designated SHA as the approving authority for erosion and sediment control and stormwater management plans for all SHA projects.
IMPROVEMENTS AND COMMITMENT AT EVERY LEVEL

CHANGES IN PLAN REVIEW AND APPROVAL

- **Improvement in Plan Review Process**
  - Better communication throughout the design, review, and approval process
  - Establish clear Guidelines and Procedures so designers and reviewers know what is required
  - Ensure consistency between all reviewers
  - Provide timely reviews and approvals

- **Improvement in Engineering Design**
  - Improve the quality and consistency of SHA’s construction plans
  - Develop ESC/SWM Designer Training (with HHD)
  - SHA to closely follow its own project development process and schedules including critical decision making affecting designs, r/w, utilities, traffic controls, field investigations, allowing input from local jurisdictions

- **Improve our ability to meet SHA business goals**
  - Get buy-in from project manager, construction, reviewer and approver at Concept (PI) stage
  - Develop a tighter integration of the SWM/ESC review process with project development milestones

- **Improve our ability to meet SHA environmental goals**
  - Improve the construction process for field modifications
  - Develop a tighter integration of the SWM As-Built plans with Design and Maintenance
Office of Construction (OOC)

- Construction Roles and Responsibilities
  - Construction PE/Inspectors
  - Construction Directives
  - Quality Control Inspections

- Contractor – Responsible personnel
  - MDE Certification (Green Card)
  - SHA Certification (Yellow Card)
  - ESC Manager
  - Superintendent

- Maryland Transportation Builders and Materials Association (MTBMA)
  - Communication and Buy In

- Performance Measures
Quality Assurance Program (QA)
Quality Assurance Program (QA)

Inspections

Training & Resources

Field Modifications & QA Concurrence

Quality Assurance Toolkit
Quality Assurance Team

Environmental Quality Assurance Program
Regional Environmental Coordinators

Don Hoey - Assistant Division Chief
Program Manager
(410) 545-8627
(410) 440-8473

Tad Daniel - Team Leader
(410) 365-0164

Clayton Ballard
Senior REC
(410) 615-0220

QA Toolkit Specialist
Aimee Semler
(410) 245-0824

District 1 & 2
Darryl English
(410) 365-2875

District 3 (MO)
Nick Campanella
(410) 812-3730

District 3 (PG)
Brian McGrath
(240) 882-0978

District 3 (PG)
Robert "Gus" Jakowski
(443) 306-8332

District 4 (East BA)
Dean Norman
(757) 644-7653

District 4 (West BA)
Remya "Cricket" Meixner
(717) 712-4072

District 5 (AA)
Lucia de la Paz
(410) 387-1656

District 6
Cliff Graham
(443) 745-2864

District 7 (HO) & GAP
Alex McCullough
(410) 713-0004

District 7
Ernest Stone
(410) 746-6983

Jan 2016
Two Part Certification

I. For Inspectors & Contractors
   - Require SHA certification to work on SHA projects
   - Require recertification every three years
   - Day and Half training
   - Launched training in cooperation with MTBMA
     - [http://www.mtbma.org/?page_id=154](http://www.mtbma.org/?page_id=154)
     - SHA staff as well as contractors must be certified

II. For Designers
   - Require SHA certification to work on SHA projects
   - Additional one day of training with Inspector training as a prerequisite
     - [http://www.mtbma.org/?page_id=156](http://www.mtbma.org/?page_id=156)
To ensure compliance with environmental regulations, E&SC permits issued to SHA and the MOU between SHA and MDE.

Review each project at least every two weeks to ensure compliance with the E&SC Plan and Contract Documents (This includes all environmental permits).

Review the ESCM’s daily log and the CPE’s documentation to determine if the E&SC Plan are being complied with.

Compliance
Inspections, QA-1 and QA-2 reports

- Compliance is documented utilizing the QA-1 and QA-2 reports
  - Grading system outlined in the 308 specifications (A,B,C,D,F)
  - Automatic ‘F’

- The inspection reports have questions beyond just E&S control issues.
  - Permit status
  - Contractors responsibilities
  - NPDES Compliance
  - SWM compliance
  - Contractor responsiveness
Compliance

Incentives & Disincentives

**Incentives –**
- Quarterly incentive payment made if average score equal to or greater than 85 for rating quarter

**Disincentives –**
- ‘D ’ or ‘F ’ rating
- LD imposed for each day
- Pay within 30 days from imposition
- No incentives will be paid for any quarter that liquidated damages are imposed.
- For 2 ‘F ’ ratings, E&S Control Certification revoked from Superintendent and ESCM for 6 months
Compliance
Inspections performed

Reviews Performed by Quality Assurance team
(FY total)

<table>
<thead>
<tr>
<th>Year</th>
<th>Reviews Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY04</td>
<td>1439</td>
</tr>
<tr>
<td>FY05</td>
<td>1682</td>
</tr>
<tr>
<td>FY06</td>
<td>1614</td>
</tr>
<tr>
<td>FY07</td>
<td>2397</td>
</tr>
<tr>
<td>FY08</td>
<td>2892</td>
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<tr>
<td>FY09</td>
<td>3234</td>
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<td>FY10</td>
<td>3194</td>
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<td>FY11</td>
<td>3051</td>
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<td>FY12</td>
<td>3904</td>
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<tr>
<td>FY13</td>
<td>4073</td>
</tr>
<tr>
<td>FY14</td>
<td>4189</td>
</tr>
<tr>
<td>FY15</td>
<td>4233</td>
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Compliance Grades

Average Grade Statewide

<table>
<thead>
<tr>
<th>Series1</th>
<th>FY 08</th>
<th>FY 09</th>
<th>FY 10</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
<th>FY 14</th>
<th>FY 15</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>92.70%</td>
<td>94.60%</td>
<td>93.90%</td>
<td>94.26%</td>
<td>95.43%</td>
<td>95.92%</td>
<td>95.79%</td>
<td>95.51%</td>
</tr>
</tbody>
</table>
Compliance
Percent of compliance statewide

<table>
<thead>
<tr>
<th>Year</th>
<th>% Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY04</td>
<td>99.43%</td>
</tr>
<tr>
<td>FY05</td>
<td>99.41%</td>
</tr>
<tr>
<td>FY06</td>
<td>99.75%</td>
</tr>
<tr>
<td>FY07</td>
<td>99.79%</td>
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<tr>
<td>FY08</td>
<td>99.86%</td>
</tr>
<tr>
<td>FY09</td>
<td>99.69%</td>
</tr>
<tr>
<td>FY10</td>
<td>99.69%</td>
</tr>
<tr>
<td>FY11</td>
<td>99.54%</td>
</tr>
<tr>
<td>FY12</td>
<td>99.51%</td>
</tr>
<tr>
<td>FY13</td>
<td>99.60%</td>
</tr>
<tr>
<td>FY14</td>
<td>99.60%</td>
</tr>
<tr>
<td>FY15</td>
<td>99.63%</td>
</tr>
</tbody>
</table>
Non-Compliance

- Non-Compliance Data is Documented and Reported to the SHA Business Plan and Governor’s office
- Non-Compliance Issues can Result in E&S Liquidated Damages, Loss of Incentive Payments and Loss of “Yellow Card” Credentials
- Non-Compliance Data may be a Consideration during a Design Build Proposal Review
Training
SHA Erosion and Sediment Control Certification Program

Provide online and in field training related to the Administration’s environmental commitments and stewardship.
Number of Individuals Certified each Fiscal Year (Yellow Card Training)
Training Resource Materials

- Updates in Progress

![Environmental Guidelines for Construction Activities](image1)

![Field Guide for Erosion and Sediment Control](image2)

![Environmental Guidelines for Maintenance Activities](image3)

- Updates in Progress
Modifications to plans and permits require approval. This approval may be necessary from a field level all the way to formal review by multiple Agencies.

QA concurrence is handled at the field level with the REC.
Modifications & QA concurrence
Modification Process

Modification request made by Contractor with proper supporting documentation.

The SHA Construction Project Engineer reviews the completed modification along with supporting documentation and upon concurrence signs the modification request.

The QA Package reviewer ensures all necessary information is included with the modification request and then forwards to the necessary reviewers.

Quality Assurance Program
Highway Hydraulics Division
Landscape Operations Division
Environmental Programs Division
Plan Review Division
Other Agencies / Divisions

All communication related to the modification will be tracked by the QA toolkit.

With completed and signed approval by all the necessary groups the Project Engineer informs the contractor that work related to the modification can then be performed.
LEVEL 1: Request for existing Conditions Adjustments, upgrade and/or add an Erosion and Sediment control (considered minor in scope)
SHA REC/QA Team Approver

LEVEL 2: Request for revision to design of the project that requires drainage calculations and/or change in limits of disturbance (considered minor in scope but require review for major implications).
SHA OHD/HHD

LEVEL 3: Request for deviation from project resource impacts (considered major in scope).
SHA OHD/PRD
Quality Assurance Toolkit

- Accuracy
- Data Integrity
- Communication
- Scheduling
- Information storage
- Business Plan Reporting
Quality Assurance Toolkit is used to document the REC/QA review of a project (30,000+ reviews since 2001)
MDE OVERSIGHT AND SHA SUCCESS

- MDE to maintain enforcement authority and continue to provide programmatic oversight
- SHA to submit quarterly and annual reports
- MDE conducts design and construction audits
- EPA may audit SHA processes
- SHA success linked to its commitment to excellence at every level of the organization
Outline

- NDOR Background
- Training and Inspection Requirements
- Tracking and Reporting Environmental Commitments
  - Identifying Commitments to Track (Pre-Project)
    - Environmental Review Process
  - Documenting Commitments in the System (During-Project)
    - Field Inspections
  - Reporting Commitments when Completed (Post-Project)
    - Compliance Oversight and Performance Reporting
- Down the Road.....
NDOR Background

- **Eight Districts Across State – Central Coordination**
  - Environmental Coordinator Position in each District – Liaison with Central Office
  - Stormwater Program Coordinated through Roadside Stabilization Unit within the Planning and Project Development Division (6 Staff)

- **Nebraska Construction Stormwater Permit**
  - Statewide General Permit required for all NDOR projects disturbing 1 acre or more

- **MS4 Permit**
  - Permitted in 2007
  - Operating in Second Permit Term
  - Not Statewide (Permitted only within the boundary of City MS4s)
  - EPA Audit Conducted October 2015 (1st Audit)
Inspector Certification Training

- Full Day Training Course
- 5 Year Certification
  - Temporary (6 month) online Certification also available
- Required for anyone inspecting or installing/maintaining BMPs on NDOR Projects.
- Re-certification Available Online
- NDOR Partners with University Of Nebraska to Administer the Training Course
Inspector Certification Training

- Certified Inspector List Managed with NDOR’s ECODatabase System (Online)
- Certification ID Numbers Auto-Populate Inspection Reports
- ECODatabase system automatically sends email notifications to inspectors as they approach their certification expiration date.
Environmental Inspection Requirements

- **Routine Environmental Inspections**
  - Occur every 2 weeks at a minimum
  - Conducted by District Construction Staff
  - Required on most projects regardless of whether or not there is a Stormwater Permit.

- **Environmental Oversight Inspections**
  - Occur monthly on projects with Stormwater Permits
  - Conducted by District Environmental Coordinators

- **Environmental Oversight Audits**
  - Occur at a predetermined frequency
  - Conducted by Headquarter Staff and Consultants
Environmental Inspection Requirements

- Findings are to be corrected within 7 days
- Immediate Action issues are to be corrected within 24 hours

Tools for Compliance

- Dis-Incentives
  - $500/day for each corrective action over 7 days
  - $1000/day for each Immediate Action over 24 hours
- Incentives
  - NDOR’s answer to “multiple mobilizations”
  - Associated with Rain Event Inspections
  - Bid Item
- Withholding Estimates
- Job Shutdown
Environmental Compliance and Oversight Database (ECODatabase or ECOD)

- Electronic reporting software used to identify, document, and report environmental commitments on NDOR construction projects.
- Consists of inspection software loaded on field machines and a web based headquarter module that manages the data.
- A “sync” process exchanges data between user machines and the headquarter site.
Projects are manually created within the ECOD system and additional project information is then automatically updated from the SiteManager (Construction) database on a regular frequency:

- Project Name/Number/Control Number
- Project Description/Location
- Project Manager/Responsible Charge
- Prime Contractor
- Key Dates (Letting, Notice to Proceed, Start & Completion)
Identifying Environmental Commitments

Project Review

- ECODatabase project approval incorporated into existing Environmental Review Process at Headquarters
  - Roadside Stabilization Unit
    - Stormwater/Erosion Control
  - Environmental Permits Unit
    - Wetlands/404 Conditions
  - Environmental Documents Unit
    - NEPA Conditions
  - Technical Documents Unit
    - Hazmat/Threatened & Endangered Species/Historical

- After reviews are completed, an ECOD Inspection Summary Report is generated and is available in ECOD for project inspectors.
Inspection Summary Report

ALMERIA EAST & WEST

This form was prepared to print on 1/21/2016. Changes made to this project after that date will not be reflected on this form. Please review this form carefully for accuracy with project commitments before completing the ES Construction Authorization Form.

NDOR Project Number: STP-91-3(109)
Control Number: 80898
MS4 Area?: No
NPDES Permit Number: CSW-201500023
T&E Species Assigned:
- American Burying Beetle
- Bald Eagle Roosts
- Migratory Birds
- Whooping Crane

Project Review Status

Project Review completed for: (All reviews completed on 11/12/2015)
- Erosion Control/Stormwater
- Threatened and Endangered Species
- Wetlands/404 Permitting
- Environmental Documents/NEPA

Summary of Required Inspections Anticipated

<table>
<thead>
<tr>
<th>Inspection Types Enabled for Project</th>
<th>Estimated # Inspections</th>
<th>Typical frequency</th>
<th>Responsible party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Compliance Oversight Inspection</td>
<td>3</td>
<td>Monthly</td>
<td>District Environmental Coordinators</td>
</tr>
<tr>
<td>Routine Environmental Inspection (Construction Phase)</td>
<td>7</td>
<td>Every 14 days (Also 0.50&quot; rain event inspections)</td>
<td>NDOR Project Inspector</td>
</tr>
<tr>
<td>Routine Environmental Inspection (Establishment Phase)</td>
<td>8</td>
<td>Monthly</td>
<td>NDOR Project Inspector</td>
</tr>
<tr>
<td>Stormwater Permit Close-Out Inspection</td>
<td>1</td>
<td>Varies</td>
<td>NDOR Headquarters Staff</td>
</tr>
<tr>
<td>Environmental Compliance Audit</td>
<td>1</td>
<td>Varies</td>
<td>NDOR Headquarters Staff</td>
</tr>
</tbody>
</table>
Documenting Environmental Commitments

Inspection Types

- ECOD Inspection Software installed on user machines
- **Type of Inspections:**
  - Routine Environmental Inspection (Construction Phase)
  - Routine Environmental Inspection (Establishment Phase)
  - Environmental Compliance Oversight Inspection
  - Environmental Compliance Audit
  - Stormwater Permit Close-Out Inspection
  - Threatened and Endangered Species Survey
  - Migratory Birds Survey
Inspectors only have access to projects they are responsible for.

Flags are color coded to indicate pending corrective actions.
Erosion Control Certification Number auto-populates the report.

Documenting Environmental Commitments

ECODatabase - Routine Environmental Inspection (Construction Phase)
Project: Test Project (For Training Purposes only)

Primary inspector: Gabe Robertson
Inspector Certification number: 0086
Expires: 2/18/2019
Inspection type: Routine Environmental Inspection (Construction Phase)
Inspection date: 3/27/2014

Inspection Information

Inspectors present:

*Weather during previous 24hrs:

Project status: Construction

Description of current construction activity:

Date of most recent precipitation since last inspection (leave blank if none):

Amount that fell (inches, #.# format):

Describe additional precipitation that fell prior to this date if applicable:
Questions are generated from environmental commitments for each project.

Answering “No” requires an action to be logged, and auto-generates a corrective action.
Documenting Environmental Commitments
Generating Inspection Reports

- Reports are electronically signed and then auto-generated.
- Inspectors can make a draft of the report before signing.

---

**Statewide Environmental Compliance Oversight Program**
**District T: Test Project for Training Purposes**
**Routine Environmental Inspection (Construction Phase)**
**Inspection Date: 1/21/2016**

---

**Project Summary**

<table>
<thead>
<tr>
<th>Project Number:</th>
<th>Project Status:</th>
<th>Project Description:</th>
<th>Test Project Description yes</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Control Number:</th>
<th>00000</th>
<th>Project Manager:</th>
<th>Gabe Robertson</th>
<th>Prime Contractor:</th>
<th>Test Prime Contractor</th>
</tr>
</thead>
</table>

| Current Activity: | Culvert Work | NPDES Permit #: | Test Permit | Wetlands Permit #: | |
|-------------------|--------------|-----------------|-------------|--------------------||

---

**Inspection Summary**

<table>
<thead>
<tr>
<th>Primary Inspector:</th>
<th>Gabe Robertson</th>
<th>Inspectors Present:</th>
<th>Test Inspectors</th>
<th>Inspection Day weather:</th>
<th>Cold and Dry</th>
</tr>
</thead>
</table>

| Most recent precipitation date: | 1/19/2016 | Amount that fell (inches) | |
|---------------------------------|-----------|---------------------------||

A ROUTINE ENVIRONMENTAL INSPECTION was conducted for this project. Find included in the following report and allow NDOR to determine the environmental necessary Corrective Actions.

Previously unresolved corrective actions: 8
Oldest unresolved corrective action (due date): 11/2/2015
This inspection corrective actions: 6
Environmental Commitment Corrective Actions: 4
Field Finding Corrective Actions: 2
Total Project Corrective Actions Needing Resolved: 14
Immediate Action Required for: 3

---

**Certification**

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowingly violating.

This document has not yet been electronically signed by Gabe Robertson.

Make Draft  Sign and Seal Now

NOTE: This report was formatted to print on 3/27/2014. It represents the most current information available for this inspection period at the time it was formatted on the user’s computer.
Completed inspection reports are automatically distributed (email) to pre-defined groups for review.

Email contains links to both the inspection report and corrective action log (punch list) for the project.

PDFs of the report and corrective action log can be generated and printed using the links within the email.
Documenting Environmental Commitments

Corrective Actions

- A “Corrective Action Punch List” can be printed and used onsite to document items as they are completed.
  - Inspectors then date-out each completed action within the ECOD system.
- Pending items carry-over into new inspections reports until they are addressed.

**ECOD - Corrective Action Punch List**

**Project: 56TH STREET - WAVERLY INTERCHANGE**

<table>
<thead>
<tr>
<th>Inspection type</th>
<th>BMP category</th>
<th>Location</th>
<th>Inspection date</th>
<th>Due date</th>
<th>Inspector</th>
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</thead>
<tbody>
<tr>
<td>Environmental Compliance</td>
<td>Erosion Control (RECP)</td>
<td>1175+00 east slope at Hwy. 6 overpass</td>
<td>3/25/2014</td>
<td>4/1/2014</td>
<td>Ron Prochaska</td>
</tr>
<tr>
<td>Oversight Inspection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Corrective Action/Inspector comments:**
Repair broken/malfunctioning BMP. Erosion blanket has been damaged by wind. Needs to be repaired and re-attached.

**Applicable Reference(s)**

Corrective action taken: 

Signed off by: 

Action date: 
ECODatabase allows NDOR to set a frequency for inspections and send out inspection reminders/past-due notices as well as an email summarizing pending corrective actions.

- Inspection Reminder
- Inspection Past Due Notice
- Pending Corrective Actions Notice
- Threatened and Endangered Species Survey Reminders
Reporting Environmental Commitments
Compliance Oversight Tools

- **ECOD Headquarter Module (Administrative Site)**
  - Easily Identify Corrective Actions Pending Statewide
  - Manage Notifications
  - Review/Monitor Inspection Reports Statewide
  - Generate Performance Reports:
    - Percent Environmental Inspection Reports Submitted
    - Percent Environmental Commitments in Compliance
    - Average Days to Address Corrective Actions by Project/District/State
    - Other
**Environmental Compliance Oversight Inspection**

<table>
<thead>
<tr>
<th>Documentation</th>
<th>Date Satisfied</th>
<th>One-Time</th>
<th>Seasonal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is a complete notice posted in a publicly accessible location near where the construction activity is underway? Notice must include a copy of Discharge Authorization Notice (DAN), SWPPP Location and Contact Person with Phone Number.</td>
<td>2/14/2014</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Is the SWPPP available for review during normal business hours? Document the SWPPP location in the Notes field.</td>
<td>2/14/2014</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Are inspection reports current and complete? Reports should cover all disturbed areas and must include findings of inspection and the corrective actions required.</td>
<td>2/14/2014</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Is there a Spill Prevention Plan on-site?</td>
<td>2/14/2014</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Have borrow, waste, or plant site approvals been acquired?</td>
<td>2/14/2014</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

**Temporary Erosion Control Plan**

<table>
<thead>
<tr>
<th>Documentation</th>
<th>Date Satisfied</th>
<th>One-Time</th>
<th>Seasonal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the locations and installation/removal dates, of erosion and sediment control measures, documented on the Temporary Erosion and Sediment Control Plan?</td>
<td>2/14/2014</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Are the following dates recorded: 1)Dates when grading occurred 2) Dates when construction activities temporarily or permanently ceased on a portion of the site.</td>
<td>2/14/2014</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Are material stockpiles documented on the Temporary Erosion and Sediment Control Plan?</td>
<td>2/14/2014</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>
Down the road....

- **ECOD Enhancements**
  - Construction Site Inspections
    - Web Based Inspection Platform (Mobile Applications)
  - Operations (Maintenance) Inspections
    - SPCC/Tank Inspections
    - Facility Runoff Control Plan (FRCP) Inspections
    - Post Construction BMP - Maintenance Inspections
    - Outfall Field Inspections
    - Wetland Mitigation Sites – Inspection/Tracking

- **Incorporate EPA Audit Recommendations**
Submit your questions by typing in the Q&A box on the WebEx panel on your screen.

- PLEASE designate ‘Host & Presenter’ in the drop down.
CoP Questions/Discussions

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CLOSING Reminder….Future Web Forum Topic

  
  Tentative March 17, 2016, 11:00 a.m. Eastern

http://environment.transportation.org