

# ALDOT STORMWATER INSPECTION GUIDELINES

## Revised 12/23/04

### CONSTRUCTION STORMWATER DEFINITIONS

**Alabama Department of Environmental Management (ADEM)** - State of Alabama environmental regulating authority.

**ALDOT Stormwater Coordinator** - Title of person located in the Design Bureau responsible for preparing and submitted all notices of registration, renewals and terminations. Responsible for overseeing all ALDOT NPDES activities.

**Best Management Practices (BMPs)** - Full implementation and maintenance of effective practices to prevent pollutant discharges from leaving State property and/or entering waters of the state. BMPs can be structural or non structural, used to prevent erosion, to contain sediment or both. They can be a single practice or more than one practice that when combined will provide continual effective treatment.

**Contractor QCI** - An ADEM and ALDOT recognized and certified QCI who serves as a representative of the prime contractor and has control and responsibility for stormwater management activities for a project.

**Discharge Point (Site)** - That location where stormwater runoff or the flow of waters leaves the ALDOT right of way.

**Division Stormwater Coordinator** - One person designated in each division to facilitate construction stormwater permit compliance within that division.

**Handheld** - Handheld computer with stormwater inspection software that allows the entry of inspection results and download into the Stormwater Permit Tracking System.

**National Pollutant Discharge Elimination System (NPDES)** - Congress mandated program under the Clean Water Act that is a comprehensive two-phased national program for addressing the non-agricultural sources of stormwater discharges that adversely affect the quality of our nation's waters. Phase II of the program began in March of 2003.

**Noncompliant** - Describes a condition where sediment or other pollutants have been carried off of ALDOT ROW by stormwater runoff or where a water body of the State of Alabama is impacted by pollutants leaving a project site.

**Notice of Registration (NOR)** - An application filed by ALDOT to ADEM requesting NPDES Permit registration. When ALDOT requests registration, it agrees to abide by the rules of the NPDES Permit and is simply registered.

**Project QCI (Project Stormwater Inspector)** - A QCI who is responsible for inspecting all NPDES related items on a particular project and entering the results of inspections into the Stormwater Permit Tracking System.

**Qualified Credentialed Inspector (QCI)** - A person who holds a valid certification from a Qualified Credentialed Inspector Program. This person has completed initial training and annual refresher training. All Project Stormwater Inspectors and Contractor QCIs must have this certification.

**Qualified Credentialed Professional (QCP)** - For ALDOT purposes, a person who is responsible for certifying stormwater inspection reports. One QCP per Division is required. Division Stormwater Coordinators ideally serve as the QCP. QCPs must be either a licensed professional engineer, a certified professional in erosion and sediment control, a registered landscape architect, a licensed professional land surveyor, a professional geologist or other licensed professionals as shown in the NPDES regulations.

**Qualifying Rain Event**- A 3/4" rain accumulation within a 24 hour period.

**Responsible Official (RO)** - The ALDOT Chief Engineer. May be the Division Engineer with permission from the Chief Engineer.

**Spill Prevention Control and Countermeasures Plan (SPCC Plan)** - A plan detailing effective measures to prevent spills and to clean up spills of any toxic pollutant. The plan shall specify materials handling procedures and describe procedures for immediate cleanup and remediation of spills should they occur. The equipment to implement a cleanup shall be stored on site with the type and location of the equipment shown in the SPCC plan.

**Stormwater Meeting** - A meeting held at the project site prior to construction to discuss stormwater and environmental issues, concerns and solutions. ALDOT and contractor personnel and subcontractors with potential stormwater or environmental roles as well as ADEM representatives should attend this meeting.

**Stormwater Management Plan (SWMP)** - Contractor submitted plan detailing the contractor's operations plan for meeting the contract requirements pertaining to stormwater management.

**Stormwater Tracking System** - A system designed to track NPDES registration from application to termination. This system also tracks all stormwater inspections. The system is responsible for automated reporting to ADEM.

**Synchronization (sync)** - The act of exchanging or updating data between a handheld and the Stormwater Permit Tracking System software located on a desktop computer.

**Unsatisfactory** - Describes a condition where a BMP is in need of repair or modification, but sediment has not yet left the ROW.

**Upset** - Chronic or catastrophic precipitation event(s) that causes a noncompliant discharge.

## GENERAL

Stormwater discharges are generated by runoff from land and impervious areas during precipitation events. These discharges often contain pollutants in quantities that could adversely affect water quality. Polluted stormwater runoff is a leading cause of impairment to the nearly 40 percent of surveyed U.S. water bodies which do not meet water quality standards. Over land or via storm sewer systems, polluted runoff is discharged, often untreated, directly into local water bodies. When left uncontrolled, this water pollution can result in the destruction of fish, wildlife, and aquatic life habitats; a loss in aesthetic value; and threats to public health due to contaminated food, drinking water supplies, and recreational waterways. The primary method to control stormwater discharges is through the use of best management practices.

The prevention of pollutants leaving construction sites and/or entering waters of the state has been a priority of the ALDOT for many years. Lately, however, the subject has become more visible than ever before. ALDOT has legally assured ADEM in a Memorandum of Agreement, entered into by the Transportation Director in December of 2002 that it is dedicated to doing a better job of ensuring compliance with NPDES regulations. This agreement requires that ALDOT do, among other things, the following:

1. Properly train employees in the area of stormwater pollution prevention and inspection.
2. Develop an inspection program that identifies problems early and reports violations to ADEM.
3. Involve the Construction Bureau in stormwater pollution issues.
4. Emphasize the importance of stormwater management to all ALDOT employees, including management.
5. Develop and implement a stormwater tracking system.
6. Regularly review and implement new stormwater management products and technologies.

It is the intent of ALDOT, from the Transportation Director on down, that all aspects of this Memorandum of Agreement be followed.

Both ALDOT employees and contractors should place a new priority on stormwater issues. They should realize that any past complacency and neglect of the issue is no longer acceptable.

Some applicable sections of the specifications that should be referenced for stormwater information include: 105-107, 201, 210, 651-659, 665 and 860.

## **CONSTRUCTION STORMWATER FORMS**

Stormwater inspection data will be reported to ADEM electronically after approval by the Division Stormwater Coordinator. At any given time, ALDOT must be able to provide original QCP and RO signed forms and reports if requested by ADEM. Information on these forms and reports should match the information sent to ADEM exactly. There will be a field version and a version printed from the tracking system for the C-34 and C-37. The Field versions as well as electronic forms on handhelds will identify the Project QCI and the Contractor QCI. The inspector's user name and password used to access the tracking system will serve as a signature. The forms will be printed by the Division Stormwater Coordinator, signed by the Division QCP and the Division RO and returned to the project office for filing. Although these forms do not require the signature of the project engineer, he or she should be made aware of the results of all inspections before they are entered into the tracking system. Copies of certified forms and reports forwarded from the division office to the project engineer should be checked for errors before filing. The Division Stormwater Coordinator should be notified immediately if changes should be made. The Contractor QCI should be present during inspections and made aware of findings shown in inspection reports. Daily synchronization of handhelds with the tracking system on office PCs is not required but should be performed immediately after an inspection and immediately following a qualifying rainfall event.

**C-34, Stormwater Inspection Report and BMP Certification.** Results of all inspections will be recorded on this form, either on field forms or electronically with a handheld. Both the field form and electronic handheld form will identify the Project QCI and the Contractor QCI. The field form will be filed at the project office. After the inspection data is entered (manually or by synchronization) into the tracking system and closed, another C-34 will be generated at the Division office for approval. After the QCP and the RO sign this approved form it is returned to the project office for filing.

**C-34a, NPDES Permit Site Data.** This form lists BMP site data as input by the project designer. This form should be printed and attached to each C-34 filed. Any discrepancies in site data noted should be reported to the ALDOT Stormwater Coordinator. Site data may also be viewed at the receiving waters page of the project data form in the tracking system.

**C-37, Stormwater Noncompliance Notification Report.** This form shall be completed for each site shown on the C-34 as being noncompliant at the time of inspection. The Project QCI and the Contractor QCI will be identified on the form. Any remedial actions performed should be shown on this form. Like the C-34, after the data is entered into the tracking system (manually or by synchronization) and closed, another C-37 will be generated at the Division office for approval. After the QCP and the RO sign this approved form it is returned to the project office for filing. Follow up inspections and reports shall address noncompliant sites until BMPs are compliant and satisfactory.

## **CONSTRUCTION STORMWATER INSPECTION TYPES**

**Daily.** Each day there is activity on the project, the Project QCI shall visually observe any portion of the project where the ground is disturbed and report any apparent BMP deficiencies. No report will be required for this observation unless deficiencies are discovered.

**Weekly.** This complete and comprehensive inspection will be performed once every 7 days as a minimum. Any type of documented inspection may satisfy the 7 day requirement. If an inspection is not performed weekly as a minimum, The permit will be shown in the past due inspection area of the tracking system with the number of days past due.

**Follow up Inspection.** Remedial actions taken for noncompliant or unsatisfactory conditions will be reflected on the following inspection report. If an unsatisfactory issue becomes noncompliant, a form C-37 should be submitted with the follow up report.

**After a Qualifying Rain Event.** This inspection shall be performed within 72 hours of the qualifying event.

**When necessitated by other events.** Inspections may be performed and reported any time as long as the minimum frequencies and triggers are satisfied. Possible reasons for extra inspections could include requests from ADEM, contractor actions, monitoring of environmentally sensitive areas, etc.

## **CONSTRUCTION STORMWATER INSPECTION REPORTING FREQUENCY**

1. The results of all inspections will be entered into the stormwater tracking system at the project level either manually or by synchronization. After a report is closed at the project level, it may only be opened for modification by the division stormwater coordinator before the form is approved. If the tracking system is not accessible at the project office, the data must be entered at the nearest computer with access to the tracking system.
2. The Division Stormwater Coordinator will be notified automatically when the inspection data is entered and the report closed. After reviewing inspection reports, the Division Stormwater Coordinator will print, obtain approval and signatures of the Division QCP and RO and send to the project office for filing. Reports must be approved within 5 business days of the inspection.
3. When approved, reports citing noncompliance or unsatisfactory conditions will be sent automatically by email to the appropriate ADEM branch office. The Construction Bureau, The Environmental Compliance Officer, The Division Engineer and Division Construction Engineer will also be notified. Inspectors and division stormwater coordinators will enter data into the system and maintain original signed forms and reports on file.

With ADEM and the Construction Bureau being notified of problems simultaneously, it is imperative that any unacceptable conditions be corrected as soon as possible. A maintenance problem that is reported as being corrected within one week will not likely be cause for any further action. For issues that are not corrected in a timely manner the Construction Bureau and possibly ADEM will be contacting the Division Construction Office to investigate.

### **Recording Rainfall:**

The project QCI is responsible for recording daily rainfall on the Mobile Edition of the tracking system. Daily synchronization with the tracking system on the office PC is not required but should be performed immediately after an inspection and immediately following a qualifying rainfall event. This daily recording of rainfall is separate from and in addition to that required for SiteManager records.

### **Division Stormwater Coordinator Responsibilities:**

This position is located in each Division Construction office. This person must be QCP certified or have a QCP supervising their duties. The duties of this position shall include:

- Notifying the Division Construction Engineer of any potential or active environmental concerns related to construction.

- Maintaining a list of current QCIs in their division. This person will assign QCIs to projects in the tracking system before construction begins and update throughout the life of the project.
- Ensuring that each project has at least one Project QCI at all times and that these inspectors are trained in entering data into the stormwater tracking system.
- Explaining stormwater inspection policies and requirements during the preconstruction conference and onsite stormwater meeting.
- Ensuring that digital photos are taken of all project discharge points and areas of concern prior to construction, of problems and corrections during construction and at project completion to document project stabilization prior to the Notice of Termination being submitted. Photos should be downloaded into the Photo Library of the tracking system.
- Certifying and ensuring that all certified inspection reports for the division are signed by a QCP and the RO, and accessible if ADEM wishes to review them. The signed forms and reports will be retained at the project office.
- Assisting project engineers in requiring the contractor to address any unsatisfactory or noncompliant issues in a timely manner.
- Assisting the ALDOT Stormwater Coordinator with permit notices of terminations when projects are complete.
- Annual reports will be created automatically by the tracking system. The ALDOT Stormwater Coordinator with the assistance of the Division Stormwater Coordinator will print the annual report and submit to ADEM with requests to renew or terminate the NOR.
- Acting as a liaison between the Construction Bureau and the division office in regards to environmental issues in construction.

### **Project QCI Responsibilities:**

Project QCIs are required on each construction project within each division. The duties of this position shall include:

- Discussing the results of all stormwater inspections with the project engineer.
- Recording daily rainfall (see recording rainfall section above).
- Being familiar with the location and condition of all discharge points within the project limits.
- Verifying that the above sites match those on the project data form and form C-34a.
- Recognizing and notifying the Division Stormwater Coordinator when discharge sites need to be added to or modified on form C-34a.
- Coordinating all inspections with the Contractor QCI.
- Ensuring that BMPs are installed only in locations that warrant their use.
- Performing all types of BMP inspections.
- Entering all inspection data into the stormwater tracking system either manually or by handheld synchronization. Inspection results will be entered at the nearest computer with access to the tracking system. Daily synchronization with the tracking system on the office PC is not required but should be performed immediately after an inspection and immediately following a qualifying rainfall event.
- Verifying that the contractor has submitted an SPCC plan when fuel or chemical storage tanks are stored within the project limits. This plan should be reviewed and filed at the project level.
- Working with the contractor's QCI to ensure that the contractor addresses any unsatisfactory or noncompliant issues in a timely manner.
- Provide the Contractor's QCI a copy of all forms C-34 and C-37 after QCP certification.

## **Contractor QCI Responsibilities:**

The Contractor shall have at least one ALDOT/ADEM approved Qualified Credentialed Inspector (QCI) assigned the responsibility of inspecting erosion and sediment control measures for each ALDOT project. The Contractor QCI shall be available for joint inspections within a 24 hour notice by the Engineer or project stormwater inspector. The Contractor shall submit the names of the responsible QCIs in the Stormwater Management Plan and whenever there is a change in QCI personnel. Written proof of the representatives' QCI certifications should also be provided.

The QCI shall have full authority for the implementation of the contractor's Stormwater Runoff Control Plan. Along with other duties, the contractor QCI shall:

- be assigned the authority by the contractor to mobilize crews to make immediate repairs to controls during working and non working hours;
- inform the Contractor's superintendent and management of all stormwater related issues;
- inspect BMPs on a daily basis to ensure that all controls are in place at all times and ensure conformance with the contract documents;
- be knowledgeable of the location and condition of all discharge points within the project limits;
- guide and direct the Contractor's forces during the installation, maintenance and correction of all BMPs;
- accompany ADEM and ALDOT inspectors on all stormwater inspections;
- work with the project personnel to ensure that any unsatisfactory or noncompliant issues are addressed in a timely manner.