



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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August 3, 2010

65-42 WQS/RJB
Tom Bennington
300 N. High Street
Muncie, Indiana 47305

Dear Mr. Bennington:

**Re: Construction Run-Off MCM
Audit/Inspection Report**

The Construction Run-Off Minimum Control Measure is one of the six components that must be implemented by an MS4 in accordance with 327 IAC 15-13. Enclosed is the final Audit/Inspection Report for the Construction Run-Off Minimum Control Measure. The purpose of the Audit/Inspection process is to identify issues that the MS4 can utilize to improve the implementation of the Construction Run-Off Minimum Control Measure. The report provides general background information, observations, recommendations, and requirements. In addition, the report may also identify program deficiencies and/or violations of a permit that will require the MS4 to respond or address within specified timelines.

This correspondence includes the Audit/Inspection Summary and supporting documentation that was obtained during the program assessment. The Audit/Inspection Summary is a cumulative overview of the MS4 program for the Construction Run-Off Minimum Control Measure. Part of the audit/inspection may also include projects that are owned and operated by an MS4. These sites are inspected and evaluated based on requirements of 327 IAC 15-5. Compliance for these projects is recorded on the "On-Site Evaluation for Erosion and Sediment Control" form that is utilized by IDEM for all projects subject to the requirements of 327 IAC 15-5.

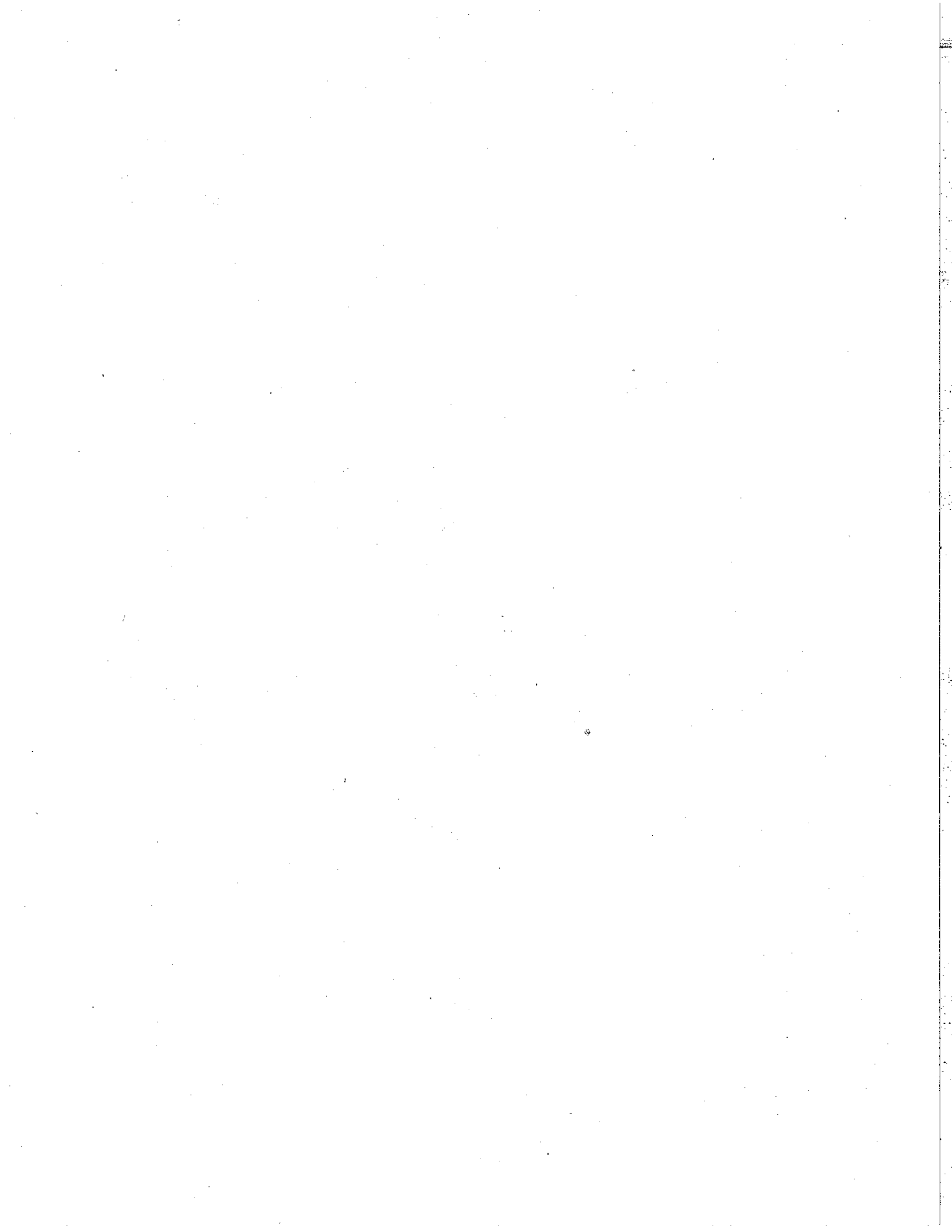
Please review the enclosed report. If you have any questions, please contact me at 317-234-5028 (rbeck@idem.in.gov) or Randy Braun at 317-234-3980 (rbraun@idem.in.gov).

Sincerely,

Rob Beck, CESSWI
Storm Water Specialist
Office of Water Quality, Watershed Planning Branch
Wetlands and Storm Water Section

Enclosures

cc: Randy J. Braun, CPESC, Storm Water Program Manager
Reggie Korthals, MS4 Coordinator



**Audit/Inspection Summary Report
Construction Run-Off Minimum Control Measure
Regulated MS4 Entities (327 IAC 15-13)**

Date of Audit/Inspection: 6/15/2010

MS4 Name: Delaware/Muncie/Yorktown

MS4 Permit Number: INR040056

MS4 Operator/Contact:

Name: Tom Bennington

Address: 300 N. High Street

City: Muncie State: Indiana Zip: 47305

Phone: 765-213-6468

E-Mail: tbennington@munciesanitary.org

MS4 Participants:

Identify the all participants representing the MS4. Include the name, title, role (Inspector Construction Program Manager, etc.), contact information (e-mail and phone number) for each participant.

Name, Title, Role, Phone, E-Mail

- Shareen Wagley, MS4 Coordinator, 765-213-6468, swagley@munciesanitary.org
- Toni Cecil, Construction Site Compliance Inspector, 765-749-1114, tcecil@munciesanitary.org

Section I - Baseline Information:

- **Construction Certification Date: 12/19/2006**
- **Post Construction Certification Date: 12/19/2006**

• **Projects Regulated by MS4:**

All new projects are regulated upon the effective date of the construction site ordinance. The MS4 did not assume responsibility for projects that were active prior to passage of the local ordinance. These projects remain under the regulatory authority of IDEM and the SWCD.

All new and active projects within the MS4 area, including those where construction was initiated prior to the effective date of the construction site ordinance.

The MS4 is a non-traditional MS4 (University, Prison, College, etc.) and does not regulate projects within the MS4.

All projects that occur within the MS4 are considered to be owned and operated by the MS4. The MS4 is responsible to obtain a permit in accordance with 327 IAC 15-5 and manage the construction site.

• **MS4 Boundaries for Administration of the Construction Minimum Control Measure:**

County MS4:

Urbanized Areas Only

Entire County, Excluding Incorporated Areas

Municipality, City, Town:

Urbanized Areas Only

Town of Yorktown, Muncie Sanitary District

Other:

• **Enforcement Mechanism Available and Process (Check all that apply and describe):**

Fines **Stop Work Orders** **Penalties** **Other:**

New fine procedures have been passed by the County. These procedures are awaiting approval by the co-permittees (Yorktown and Muncie), to provide uniform enforcement. Regarding the existing mechanism, inspection reports are issued after completion of the inspection to onsite personnel. Additionally, both the property owner and designer may receive copies based on the violation. A specified time is given for corrections. If corrections are not made, violation letters are sent to all parties. The MS4 has the option to issue Stop Work Orders if compliance is not achieved. Stop Work Orders may be issued immediately based on the severity of the violation. Each jurisdiction is notified of Stop Work Orders issued in their area.

• **Plan Review Process:**

Toni Cecil conducts all plan reviews. She is a CESSWI (Certified Erosion, Sediment, Storm Water Inspector). The MS4 utilizes the standard DNR form for review along with those same guidelines and reviews 100% of the submitted plans. Plans are usually reviewed within a week at most, but the ordinance allows for a period of 28 days. The Soil & Water Conservation District is not involved in the plan review process. A filing system is in place.

• **Compliance Inspection Process:**

▪ **Regulated Projects:**

Toni Cecil, CESSWI, conducts all site inspections. She has five years inspection experience and has inspected with two different MS4 entities. A custom inspection form is used, based off the generic Certified Inspector of Sediment and Erosion Control (CISEC) form. Active sites are inspected on average at least twice a month and inactive sites once a month. Priorities are given to sites that are at an early stage of activity (i.e. grading), are near sensitive resource areas and ones with past enforcement issues.

▪ **Projects Owned and Operated by the MS4:**

The contractors are relied upon to provide their own self-inspections on all municipal sites. They are expected to conduct self-inspections weekly and after each ½" or more of rainfall. Toni Cecil attempts to check these sites at the same frequency interval that private sites are inspected. The same inspection form is used by the MS4 for quality assurance.

• **Post-Construction Measures and/or Principles Applied:**

At this time, the MS4 does not require a percentage for removal for Total Suspended Solids (TSS). The guidelines provided by the Indiana Storm Water Quality Manual are used. Rain gardens, alternative road ice applications, increased green space versus impervious surface and low impact design storm sewer systems are being designed and installed on several projects.

The MS4 applies the same requirements and standards to projects that are owned and operated by the MS4 as they do to the regulated community.

Section II - Field Audit/Inspection Summary:

This summary has been prepared based on the assessment of individual projects regulated by the MS4 and projects that are owned and operated by the MS4. The purpose of the Construction Minimum Control Measure Audit/Inspection is to identify the strengths and weaknesses of an MS4 program. The ultimate goal is to strengthen the ability for an MS4 to administer the Construction Run-Off Minimum Control Measure as required by 327 IAC 15-13.

- **Projects Owned and Operated by the MS4:**

For projects owned and operated by the MS4, the project contractor is responsible for conducting the self monitoring inspections as required by 327 IAC 15-5-7 (18). These are performed according to the project contract requirements.

Project(s) Inspected:

A. Jakes Creek Lift Station

Observations:

Earthwork and construction is nearly complete and ready for stabilization. The site appears to have had previous problems based on previous reports by Toni Cecil, but there is also evidence that multiple attempts have been made to remedy these issues. Refer to the enclosed inspection report for additional information.

- **Projects Regulated by the MS4:**

Project(s) Evaluated to Assess the MS4 Regulatory Program:

A. Muncie CSO 18

B. Bravini Wind

C. Mursix

Plan Review - Observations:

The MS4 SWPPP review process is sufficient. The plan reviewer is thorough and adequately addresses the critical issues that are often associated with plan review. The reviewer corresponds with applicants/plan preparers and clearly identifies deficiencies and expectations to ensure an adequate plan.

There were no areas of concern identified during the evaluation of the plan and correspondence associated with Muncie CSO 18 and Bravini Wind.

The MS4 will require a maintenance bond for post-construction practices. These have been entered into the ordinance, but not yet enacted.

Compliance Inspections - Observations:

- The City Muncie/Delaware/Yorktown MS4 appears to have a program that addresses construction site run-off issues for which they regulate in accordance with the requirements of the local ordinance.
- Inspections are conducted in an organized professional manner. The inspectors are knowledgeable about the project and know the contractors and responsible parties for the project.

Section III - Program Assessment, Comments, Recommendations, and Requirements:

• **Comments:**

- The Delaware/Muncie/Yorktown MS4 has developed a program that meets the intent and objectives of the Rule. They have placed a high priority on the Construction Minimum Control Measure, including hiring dedicated staff to address both plan review and site inspection.
- The program is staffed by trained personnel. Shareen Wagley and Toni Cecil recognize training as a priority and make every effort to attend training opportunities on erosion and sediment control and storm water management. The MS4 storm water inspector is a Certified Erosion, Sediment and Storm Water Inspector (CESSWI).
- The MS4 staff emphasizes the need for MS4 owned and operated projects to set the standard for compliance that is expected of permitted projects. The MS4 informs other departments within the municipality of the requirements to implement erosion and sediment control on their projects and has strong cooperation and support from these departments.
- Pre-construction meetings: The MS4 requires a pre-construction meeting for each project. During the meeting, the erosion and sediment control inspector for the site must be designated. The developer is required to ensure the first three weeks of self-inspections are sent to the MS4.
- The site inspection form is adequate to meeting the requirements of the Construction MCM ordinance. It does not, however, contain an area to record those present and actively involved with the site inspection.
- Over the past several years IDEM has referred several complaints to the MS4. The MS4 followed up on these complaints and resolved issues in a prompt and efficient manner.

• **Overall Program Assessment:**

(S = Satisfactory, M = Marginal, U = Unsatisfactory, NE = Not Evaluated, NA = Not Applicable)

S M U NE NA

- The ordinance for the Construction Site Run-Off Control Minimum Control Measure meets the intent of 327 IAC 15-5.**
Comment: From observations during and prior to the audit, the-Construction MCM ordinance appears to meet the intent of 327 IAC 15-5.
- The MS4 reviews the Construction Site Run-Off MCM a minimum of once every five (5) years.**
Comment: The MS4 recognized through operation and experience that the MCM needed improvement and additional language for greater efficiency. Most notably, the ordinance lacked a suitable fining mechanism to handle smaller, but still chronic issues on a site.
- The MS4 has developed requirements for the implementation of measures associated with erosion, sedimentation, and other waste on construction sites.**
Comment: Standards are recognized, but a manual of standards and practices is still under development by Commonwealth Engineers. Each municipal entity has been involved in development of these standards. Currently the MS4s rely upon the Indiana Storm Water Quality Manual
- The MS4 reviews and approves construction plans that are submitted in accordance with the local MS4 ordinance.**
Comment: The MS4 reviews 100% of submitted construction plans and does so in accordance with the local ordinance.

S M U N C I E

- The MS4 has procedures to administer an inspection program.**
Comment: The MS4 has detailed and thorough procedures in place to run its site inspection program.
- The MS4 has procedures to enforce the Construction Run-Off MCM.**
Comment: The MS4 has an enforcement mechanism in place to enforce its Construction Run-Off MCM, which provides a stop work order to help achieve compliance with more options enacted recently in the revised ordinance.
- The MS4 has procedures to identify priority sites for inspection and enforcement.**
Comment: The MS4 has a well-developed process to identify priority sites.
- MS4 personnel responsible for plan review, inspection, and enforcement of construction activities attend annual training.**
Comment: The MS4 demonstrated that its personnel have attended significant amounts of training to help them address plan review, inspection and enforcement of their ordinance.
- The MS4 is effectively managing projects that are owned and operated by the MS4.**
Comment: The MS4 has a strong relationship with other agencies that are part of the MS4 and has utilized this to develop effective management strategies to handle projects owned and operated by the MS4.

• **Recommendations:**

- The MS4 must continue to ensure that internal operations for construction projects owned and operated by the MS4 are compliant with 327 IAC 15-5. One area that is important and often overlooked is policy and procedures for the implementation of a Self Monitoring Program as required by 327 IAC 15-5-7 (18). The requirement to administer a Self Monitoring Program is a mechanism for the permitted entity to manage and operate a project site. This responsibility extends beyond the local Department that administers the MS4 program and includes other Departments within the MS4. The MS4 must continue to work with other Departments to ensure that each is knowledgeable of the requirements associated with all local, state, and federal permits.
- The MS4 field inspection and plan review staff, should continue to take advantage of training opportunities to further their understanding of erosion and sediment control and storm water management issues. Toni Cecil has attended training sessions and should continue to take advantage of training opportunities to further her understanding of erosion and sediment control and storm water management issues.

- **Further Action by IDEM:**

IDEM will perform follow-up inspections of projects owned and operated by the MS4 as they become active and will periodically re-visit projects sites that are regulated by the MS4. Additional projects will be visited with MS4 staff to further assess the Construction Run-Off Minimum Control Measure.

- **Report Prepared by: Robert Beck, Storm Water Specialist**
- **Questions regarding this report should be directed to:**

Robert Beck, Storm Water Specialist

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or

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