

<b>Wetlands and Storm Water Section</b> <b>Storm Water Program</b> <b>Office of Water Quality</b> <b>Indiana Department of Environmental Management</b>	<b>Authority:</b> <i>This inspection was conducted pursuant to Indiana Code (IC) 13-14-2-2 and is consistent with the requirements of IC 13-14-5.</i>
Municipal Separate Storm Sewer System (MS4) Minimum Control Measure Audit: <ul style="list-style-type: none"> <li>• Construction Site Run-off</li> <li>• Post-Construction Run-off</li> </ul>	<b>Date of Audit: 10/26/2022</b> <b>Report Issued: 11/15/2022</b> <b>Audit Conducted By: Rob Beck</b> <b>Report Prepared By: Rob Beck</b>

This audit report is a cumulative overview of the MS4 program for the construction site run-off and post-construction run-off minimum control measures. The report provides general background information, observations, recommendations, and requirements. The purpose of the audit is to identify program areas where an MS4 can improve program implementation, but to also identify deficiencies and/or violations that will require the MS4 to respond or address within specified timelines.

**Section A: MS4 Program Information**

<b>MS4 Entity: Beech Grove</b>	<b>County: Marion</b>
<b>MS4 Permit Number: INR040023</b>	<b>Permit Start and Expiration: 12/18/21-12/17/26</b>
<b>MS4 Operator: Mayor Dennis Buckley</b>	
<b>MS4 Coordinator/Representative: Brad Merriweather, Public Works</b>	
<b>Audit Participants: Phil Gurganus, Brad Merriweather- Beech Grove, Michael Ellis, Mary Atkins - Wessler</b>	

**Construction Certification Date: 4/29/2005**  
**Post-Construction Certification Date: 4/29/2005**

**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.

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 Program Administration of the Construction Minimum Control Measure:**

County MS4:  Urbanized Areas Only  Entire County, Excluding Incorporated Areas  
Clarification:

Municipality, City, Town:  Urbanized Areas Only  Other  
Clarification: Whole City

**Outreach to the Regulated Community (Construction Site and Post-construction Run-off):**  
**Brad Merriweather**

**Section B: Overall Program Assessment - Construction Site Run-off**  
*(S = Satisfactory, M = Marginal, U = Unsatisfactory, NE = Not Evaluated, NA = Not Applicable)*

S M U NE NA

**(B1)**      The construction site ordinance meets the intent of 327 IAC 15-5.

**Comment:** The ordinance is in compliance with the previous Rule. The updated ordinance to meet compliance with the new General Permit is to be worked on after the beginning of year.

**Recommendations:**

**Requirements:**

<p>S M U NE NA</p> <p>(B2) <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	<p>Requirements and standards have been developed and/or adopted for the implementation of measures associated with erosion, sedimentation, and other waste on construction sites.</p> <p><b>Comment:</b> Beech Grove MS4 has its own Storm Water Manual. It also has forms and checklists designed to guide applicants through the permitting process. These are all available on Beech Grove's web site.</p> <p><b>Recommendations:</b></p> <p><b>Requirements:</b></p>
<p>S M U NE NA</p> <p>(B3) <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	<p>Construction plans submitted for regulated projects are reviewed in accordance with the local MS4 ordinance.</p> <p><b>Comment:</b> Plans come in through the MS4 and copies are sent to the Consultant for review. The Consultant bills separately to the developer. MS4 personnel are kept informed during the review process, since it is combined with a drainage review, and then a final product is delivered back to Beech Grove.</p> <p><b>Recommendations:</b></p> <p><b>Requirements:</b></p>
<p>S M U NE NA</p> <p>(B4) <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	<p>Construction projects are managed through a tracking system that includes name, address/location, duration, indication of compliance actions, and status (active NOI or equivalent and termination).</p> <p><b>Comment:</b> Tracking is done by electronic spreadsheet. Wessler manages the database and shares information as needed with MS4 personnel. Permits and bonding are managed through City Hall. There are currently only four active projects, and a low volume of projects is typical.</p> <p><b>Recommendations:</b></p> <p><b>Requirements:</b></p>
<p>S M U NE NA</p> <p>(B5) <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	<p>The construction site run-off inspection program has established procedures and written policy for program implementation; including sites that are a priority for inspection.</p> <p><b>Comment:</b> Prioritization is addressed during plan review and as complaints come in. The consultant does inspections for the MS4 and relies on the MS4's criteria and form for inspections. The form refers to Beech Grove's authority (ordinance). There is no policy in place for inspection outside of the working relationship between the Consultant and the MS4.</p> <p><b>Recommendations:</b></p> <p><b>Requirements:</b> Develop a policy along with the new ordinance for program implementation.</p>
<p>S M U NE NA</p> <p>(B6) <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	<p>Policy and procedures are implemented to enforce the construction site run-off program. The MS4 utilizes <input checked="" type="checkbox"/> Fines <input checked="" type="checkbox"/> Stop work orders <input type="checkbox"/> Penalties <input type="checkbox"/> Permit suspension</p> <p><b>Comment:</b> Projects can receive a Notice of Violation after deficiencies are noted. Stop Work Orders are the preferred method, but penalties and compensatory damages can be assessed to \$2500 for first offense and \$7500 for additional offenses. In practice, stop work orders have been sufficient to maintain compliance.</p> <p><b>Recommendations:</b></p> <p><b>Requirements:</b></p>
<p>S M U NE NA</p> <p>(B7) <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	<p>MS4 personnel responsible for plan review, inspection, and enforcement of construction activities attend annual training.</p> <p><b>Comment:</b> Consultants are solely responsible for inspection and plan review. Both assigned staff have CPESC certification. One has INDOT level 2 inspection credentials, and the other is a P.E. Training records are available from the consultant.</p> <p><b>Recommendations:</b> MS4 personnel should attend trainings as they are able. Even though the consultants manage the day-to-day program, MS4 personnel need to be able to understand their responsibilities and be able to address stormwater issues with the public. Refer to the MS4GP of the new (12 hours) requirements for MS4 staff.</p> <p><b>Requirements:</b></p>

S M U NE NA

(B8)      The construction site run-off program is reviewed at least once every five (5) years.

**Comment:** The ordinance was last updated in 2015, but the Consultant and MS4 meet annually to discuss modifications or updates that might make the program more efficient. It has not been codified in the ordinance, though. The ordinance is also being worked on to update it to meet the standards of the new general permit.

**Recommendations:**

**Requirements:**

(B9) Overall performance in administering the construction site run-off minimum control measure.

**Comment:** The consultant provides plan reviews in tandem with MS4 personnel, with the consultants taking the lead. One plan was reviewed, and the review was found to be adequate. The consultant-provided inspector is knowledgeable and well-trained. Several reports were also reviewed and showed good command of erosion and sediment control principles and needed remedies to observed deficiencies.

**Recommendations:**

**Requirements:**

### Section C: Overall Program Assessment - Post-construction Site Run-off

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

S M U NE NA

(C1)      The post-construction ordinance addresses local resource issues and meets the intent of 327 IAC15-5.

**Comment:** Ordinance calls for 80% TSS removal from stormwater. There is a preapproved list of practices maintained by the MS4. Other practices can be chosen, but they have to demonstrate the 80% TSS removal through testing data. Indianapolis' preapproved list of practices is also accepted.

**Recommendations:**

**Requirements:** Review the minimum standards in the MS4GP related to post-construction and modify the MS4 ordinance accordingly.

S M U NE NA

(C2)      Requirements and standards have been developed and/or adopted for the implementation of measures associated with post-construction site run-off.

**Comment:** Preapproved practices and practices accepted by the City of Indianapolis are accepted by Beech Grove. The primary list of approved practices and design standards are in the Beech Grove Storm Water Quality Manual.

**Recommendations:**

**Requirements:**

S M U NE NA

(C3)      The MS4 directs physical growth away from sensitive areas and towards those that will not compromise water quality. The MS4 manages the selection of measures in wellhead protection areas, discharges to other sensitive resource areas, and where applicable sinkholes.

**Comment:** There are some zoning requirements that direct growth away from sensitive areas, however Beech Grove's footprint is built out and there are few if any sensitive areas remaining. Floodplain management is handled by Indianapolis. Wetlands and waterways are noted, but no special policies are in place to preserve them.

**Recommendations:**

**Requirements:**

S M U NE NA

(C4)      New retail gasoline outlets and refueling areas that replace their existing fuel tank systems are required by ordinance or other means to design and install appropriate measures to reduce lead, copper, zinc and polyaromatic hydrocarbons in storm water run-off from the facility.

**Comment:** The policy is in the post-construction section of the manual. It is currently being used for an active project (Circle K). The MS4 requires practices for treating and capture.

**Recommendations:**

**Requirements:**

S M U NE NA

(C5)      Post-construction plans submitted for regulated projects are reviewed in accordance with the local MS4 ordinance.

<p><b>Comment:</b> The Consultant does all reviews for post-construction plans. The MS4 personnel are involved in the reviews if needed to be kept apprised of their progress and to provide local knowledge.</p> <p><b>Recommendations:</b></p> <p><b>Requirements:</b></p>
<p>S M U NE NA  (C6) <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> The MS4 requires the development and implementation of written operational and maintenance plans for all planned structural post-construction storm water management measures to ensure long-term functionality.</p> <p><b>Comment:</b> Beech Grove's Ordinance calls for an O&amp;M Manual for post-construction on all job sites. It also covers city inspections and easements. The O&amp;M Manual is eventually to be tied in with the deed for better coverage with property transfer, but this has not yet occurred yet.</p> <p><b>Recommendations:</b></p> <p><b>Requirements:</b> Notify IDEM when this modification is made to the post-construction ordinance.</p>
<p>S M U NE NA  (C7) <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> The post-construction site run-off inspection program has established procedures for implementation, including a mechanism to enforce failure to maintain a post-construction measure.</p> <p><b>Comment:</b> Post-construction systems are inspected on a five-year basis. There is a general list that is worked on by the Consultant. An inspection form that is used.</p> <p><b>Recommendations:</b></p> <p><b>Requirements:</b></p>
<p>S M U NE NA  (C8) <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> MS4 personnel responsible for plan review, inspection, and enforcement of the post-construction program attend annual training.</p> <p><b>Comment:</b> Consultants attend regular training such as INAFSM and the MS4 Annual Meeting, The Consultant also does training for post-construction practices for other MS4's.</p> <p><b>Recommendations:</b></p> <p><b>Requirements:</b> As with construction, MS4 personnel should attend post-construction trainings as they are able. Even though the consultants manage the day-to-day program, MS4 personnel need to be able to understand their responsibilities and be able to address stormwater issues with the public. Refer to the MS4GP of the new (12 hours) requirements for MS4 staff.</p>
<p>S M U NE NA  (C9) <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> The post-construction site run-off program is reviewed at least once every five (5) years.</p> <p><b>Comment:</b> The MS4's post-construction ordinance was last updated in 2015 and has gone through annual reviews since then. No actual changes have been made prior to this cycle. It is also currently being updated to meet the guidelines of the new general permit.</p> <p><b>Recommendations:</b></p> <p><b>Requirements:</b></p>
<p><b>(C10) Overall performance in administering the post-construction site run-off minimum control measure.</b></p> <p><b>Comment:</b> The MS4 staff and Consultants have a close relationship in plan review and routinely work together for regular inspection. There is a solid process in place to accomplish the routine activities. The function of this process is very similar to the process used by Indianapolis. Indianapolis previously ran every aspect of Beech Grove's construction and post-construction program.</p> <p><b>Recommendations:</b></p> <p><b>Requirements:</b> The MS4 should apply the same standards and/or requirements for post-construction to those projects they own and/or operate as they require for those projects they regulate.</p>

**Section D: Audit Summary**

**Action Items:**

• **Recommendations:**

• **Required Actions:**

- (1) **B5:** A policy should be developed with regard to long-term management and prioritization of construction projects. According to MS4 staff, this is in planning to be developed with the passing of the new ordinance.
- (2) **B7:** MS4 personnel should attend trainings as they are able. Even though the consultants manage the day-to-day program, MS4 personnel need to be able to understand their responsibilities and be able to address stormwater issues with the public.
- (3) **C6:** Notify IDEM when this modification is made to the post-construction ordinance.
- (4) **C8:** As with construction, MS4 personnel should attend post-construction trainings as they are able. Even though the consultants manage the day-to-day program, MS4 personnel need to be able to understand their responsibilities and be able to address stormwater issues with the public.

**Attachments:**

**Action by IDEM:** Failure to address and/or respond to deficiencies and/or violations may result in further action by IDEM including, but not limited to a compliance meeting and/or a non-compliance letter. As warranted, IDEM will perform follow-up inspections for projects owned and operated by the MS4 as they are permitted and will periodically revisit sites regulated by the MS4.

**Section E: Audit Information**

**Report Provided to:**

- Brad Merriweather – Beech Grove

**Report distributed:**  Email     Mail     Via Certified Mail:

**Questions and the submittal of documents in response to this report should be directed to:**

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