

Quick facts on MS4 Permitting...

Proposed changes and new requirements for Indiana's MS4 Permits

Thank you for your interest in the proposed MS4 General Permit!

IDEM is currently working on converting Environmental Rule 327 IAC 15-13 to an NPDES Municipal Separate Storm Sewer System General Permit (MS4 GP) which will apply to MS4 entities across the state. How does the proposed MS4 GP compare to Rule 13? This Fact Sheet provides a summary of proposed changes and new requirements.

Draft MS4 GP Section 1.0: General Permit Coverage

Section 1.2 Discharges Authorized by the Draft Permit

The draft MS4 GP includes a list of categories of other flows that can be commingled with stormwater, provided that the discharges are either regulated by other NPDES permits or are not identified by the department as a significant source of pollutants. The list from MS4 GP Section 1.2(b) is shown below at left. Rule 13 has a similar list and is shown below at right. The yellow text highlights indicate clarifications for several of the potential authorized discharges and four new items with the new items being as follows:

- (8) Storm sewer cleaning water
- (14) Non-commercial car washing by non-profit organizations
- (15) External building wash down, without detergents
- (18) Water to wash vehicles and equipment, provided there is no discharge of soaps, solvents, or detergents

Authorized Discharges from Draft MS4 GP (Subject to Conditions):

(1) Water line and hydrant flushing	(2) Footing drains
(3) Landscape irrigation water	(4) Lawn watering
(5) Rising ground water	(6) Foundation drains
(7) Residential street wash waters	(8) Storm sewer cleaning water
(9) Fire fighting activities	(10) Water from crawl space pumps
(11) Uncontaminated ground water	(12) Springs
(13) Residential car washing	(14) Non-commercial car washing by non-profit organizations
(15) External building wash down, without detergents	(16) Dechlorinated/debrominated swimming pool discharges
(17) Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20))	(18) Water used to wash vehicles and equipment, provided there is no discharge of soaps, solvents, or detergents
(19) Pavement wash waters provided spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used	(20) Uncontaminated condensate from air conditioning units, coolers, and other compressors, and from outside storage of refrigerated gases or liquids

Authorized Discharges from Rule 13 (Subject to Conditions):

- (1) Water line flushing.
- (2) Landscape irrigation.
- (3) Diverted stream flows.
- (4) Rising ground waters.
- (5) Uncontaminated ground water infiltration.
- (6) Uncontaminated pumped ground water.
- (7) Discharges from potable water sources.
- (8) Foundation drains.
- (9) Air conditioning condensation.
- (10) Irrigation water.
- (11) Springs.
- (12) Water from crawl space pumps.
- (13) Footing drains.
- (14) Lawn watering.
- (15) Individual residential car washing.
- (16) Flows from riparian habitats and wetlands.
- (17) Dechlorinated swimming pool discharges.
- (18) Street wash water.
- (19) Discharges from firefighting activities.

Section 1.3 Discharges Not Authorized by the Draft Permit

"The following discharges are not authorized by this permit:

- (a) Direct discharges into waters that are designated as an Outstanding National Resource Water (ONRW) defined at IC 13-11-2-149.5 or an Outstanding State Resource Water (OSRW) defined at IC 13-11-2-149.6 and listed at 327 IAC 2-1.3-3(d) when the commissioner determines the discharge will lower the water quality as defined under 327 IAC 2-1.3-2(50) of such a water downstream of that discharge."

Draft MS4 GP Section 3.0: Baseline Water Quality Characterization

The changes from current Rule 13 language to the draft MS4 GP in the opening paragraph of this section are identified below with ~~strikeouts~~ (deletions) and red font (new text):

~~"An MS4 operator shall~~ A MS4 must characterize the water quality of all known waters that receive stormwater ~~outfall~~ discharges ~~within~~ from the MS4 area. ~~This~~ The characterization ~~may~~ must begin with the receiving waters identified in the notice of intent (NOI) letter submittal, and, as additional receiving waters are identified, the characterization shall ~~must~~ be expanded to ~~those additional receiving waters and the subsequent information presented in the corresponding annual report required under section 18 of this rule.~~ further develop program goals and objectives."

Draft MS4 GP Section 4: Performance Requirements & Program Implementation

While Rule 13 referenced standard Indiana NPDES permit language via use of a Citation Reference, the Draft MS4 GP specifically states the following:

"All permittees must manage discharges to meet numeric and narrative water quality standards for any discharges authorized under this permit, with compliance required upon beginning such a discharge. For stormwater discharges, implementation of the stormwater quality management plan (SWQMP) and appropriate stormwater management measures and principles is expected to achieve the controls necessary to meet water quality standards."

Requirement to Certify Minimum Control Measures (MCMs)

All MCMs now require the submittal of a Certification with the submittal of a Notice of Intent (NOI) per Section 4.2(a)(9). These certifications have a schedule for new MS4s, but are required with the NOI when a MS4 renews coverage.

Section 4.1 General Performance Requirements

- 4.1 (b)(3): For a County MS4, all MCMs requiring an ordinance (Illicit discharge, Construction, and Post-Construction) must be administered county wide.
- 4.1 (b)(4): For a County MS4, all facilities owned/operated by a MS4 are subject to the new permit, regardless of whether it is in or outside of the urbanized area.
- 4.1 (c): Maintain a list of all individuals administering each MCM and update as changes occur. Updates must also be submitted to IDEM.
- 4.1 (d): Clarification of staff training. The new permit identifies that each employee responsible for administering a MS4 program must obtain 24 hours of training with at least 8 hours specific to each MCM they are associated with. Note: the permit should be clarified and specify this requirement is annual.
- 4.1 (j)(1): Update ordinances and/or have a regulatory mechanism (Illicit discharge, Construction, and Post-Construction) in place within 365 days of NOI submittal.
- 4.1 (j)(2): Revise the Stormwater Quality Management Plan (SWQMP) within six months of permit coverage.

Section 4.2 Stormwater Quality Management Plan General Requirements

- 4.2 (a)(1): Jurisdictional boundaries must be identified using GIS.

Draft MS4 GP Section 4.3: Public Education & Outreach MCM

Typical for all MCM's, the previous Rule 13 terminology of "Reduction Goal Percentages and Timetables" has been removed. For this MCM, the Draft MS4 GP language is generic and does not state specific objectives, but allows the MS4 to develop these items for the MS4.

- 4.3 (a)(1): Identify target audiences through an assessment of constituents within the MS4.
- 4.3 (a)(2): Identify three high priority issues within the MS4 to which education will be targeted.
- 4.3 (a)(3): Create an educational message based on three targeted residential issues, three targeted industrial/commercial issues, and two construction issues.
- 4.3 (a)(5): Conduct annual training for builders, developers, contractors, etc.
- 4.3 (a)(6): Communicate and/or distribute information on those educational message identified for the MS4.
- 4.3 (b)(1): The signed certification for a new MS4 must be submitted 180 days following submittal of a NOI. This timeline has been reduced from 365 days that is in the current Rule.
- 4.3 (c): Maintain an inventory of all educational resources materials used by the MS4.

Draft MS4 GP Section 4.3: Public Education & Outreach MCM (Cont'd.)

- 4.3 (g): The MCM lists specific items that must be in the Annual Report. Reportable goals from the current Rule have not changed and have been addressed through the following new reportable items.
 - Each message developed and the method(s) used to reach the goals and objectives.
 - Identification of each targeted audience selected.
 - The percentage of targeted stakeholders reached during the reporting period and any behavior changes observed.
 - A list of all public education materials developed and used during the reporting period.
 - A list of educational outreach programs and the location of the event conducted by the MS4 or a partner.

Draft MS4 GP Section 4.4: Public Participation & Involvement MCM

For this MCM, the Draft MS4 GP language is generic and does not state specific objectives, but allows the MS4 to develop these items for the MS4.

- 4.4 (a)(2): Identify target audiences based on ethnic and economic groups.
- 4.4 (a)(3): Conduct an assessment of citizens to identify individuals that may have an interest in program participation.
- 4.4 (a)(4): Conduct two public involvement events annually. Note: this item is not an educational event as identified in the Public Education MCM, but related to informational meetings or activities to inform/obtain input from the public about the program.
- 4.4 (a)(5): Report program updates to public officials two times per year.
- 4.4 (b)(1) through (4): Establish a citizens Advisory Board within first six months and meet at least quarterly.
- 4.4 (d): Develop a website within the first six months of permit coverage.
- 4.4 (f): The signed certification for a new MS4 must be submitted 180 days following submittal of a NOI. This timeline has been reduced from the 365 days of the current Rule.
- 4.4 (i): The MCM lists specific items that must be in the Annual Report. Reportable goals from the current Rule have not changed and have been addressed through the following new reportable items.
 - Identification of each public participation and involvement activity conducted, including the number of events, a description of the activity, attendance, and an assessment if the goals and objectives were met.
 - Number of individuals that participated on the stormwater advisory committee, including the stakeholder group each represents.
 - Number and type of targeted audiences.
 - Number or percentage of citizens that participated in stormwater program public events (current Rule calls out number of drains marked, which can be reported as part of this requirement).
 - Documentation that presentations were made to elected officials.

Draft MS4 GP Section 4.5: Illicit Discharge Detection & Elimination MCM

Categories of allowable non-stormwater discharges are now located in Section 1.2 (see first column of this Fact Sheet at right).

- 4.5 (c)(5): A MS4 must develop SOPs to provide guidance to staff, including standardized forms. The permit outlines the
- 4.5 (c)(6): Develop and implement a program to report illicit discharges. This is in the Rule, but the new permit expands on this item to provide guidance on options.

Draft MS4 GP Section 4.5: Illicit Discharge Detection & Elimination MCM

- **4.5 (d)(1):** The signed certification for a new MS4 must be submitted 365 days following submittal of a NOI. This timeline has not changed from what is required in the current Rule.
- **4.5 (f):** A map of the MS4 outfalls and conveyances is required under the Rule. The new permit includes the same items. However, it includes the following additions under 4.5 (f)(1) and (4):
 - Outfalls must be named using three to four characters. This numbering system is being required for compatibility with the U.S. EPA database.
 - Provide, by reference, a description of the outfall and photographs of each outfall.
- **4.5 (g):** Develop a map that identifies high priority areas for administering the IDDE program based on land use, history, and frequency of discharges, etc.
- **4.5 (h):** Public education for IDDE is part of the current Rule, however the new permit requires an outreach plan for this item.
- **4.5 (h)(3):** Training for MS4 employees must be conducted annually. Annual is not specified in the current Rule. In addition, the new permit specifies that this training must be documented.
- **4.5 (j):** Identify a minimum of ten percent of the outfalls within each priority area (item (g) in the permit) that will require dry weather screening once per year. In addition, the MS4 must add outfalls for dry weather screening when an illicit discharge occurs outside of a priority area.
- **4.5 (k):** The MCM lists specific items that must be in the Annual Report. Reportable goals from the current Rule have not changed with the exception of the following new reportable items.
 - Number of public reporting incidents of non-stormwater discharges and/or spills.
 - Number of enforcement actions taken.
 - A list of Informational brochures and guidance documents developed

Draft MS4 GP Section 4.6: Construction Site Stormwater Run-Off MCM

- **4.6 (c)(2) and (c)(4):** Requires the MS4 to develop a plan review form, etc. to document plan review results and a method to notify responsible individuals of the status of the plan.
 - **4.6 (d)(1):** Requires the MS4 to develop a standardized inspection form and a mechanism to notify the responsible party.
 - **4.6 (d)(3):** Inspect 75% of active construction sites annually.
 - **4.7 (j):** The signed certification for a new MS4 must be submitted 365 days following submittal of a NOI. This timeline has not changed from what is required in the current Rule.
 - **4.6 (l):** Conduct and/or provide annual training for MS4 staff. Training must be tracked and maintained by the MS4.
 - **4.6 (m):** The permit identifies permitting for MS4 owned/operated projects. This includes submittal of plans, a provision that the project must comply with the MS4 ordinance for Construction Site Run-off and the State's general permit, manage projects across all MS4 departments, and develop policy and procedures to ensure coordination across MS4 departments.
 - **4.6 (n):** The MCM lists specific items that must be in the Annual Report. Reportable goals from the current Rule have not changed with the exception of the following.
 - Identify the number and types of training opportunities that were provided to contractors, developers and builders during the reporting period.
- Consider adding:** "Updates to the Construction Site Run-off ordinance or other regulatory mechanism". This item appears in the Post-Construction MCM.

Draft MS4 GP Section 4.7: Post-Construction Site Stormwater Run-Off MCM

- **4.7 (c):** Incorporate pollutant reduction performance standards into ordinance or other documents.
- **4.7 (c)(1):** At a minimum, utilize the IDEM Construction Site Run-off General Permit as the standard. Also refer to 4.7 (c)(3) related to post-construction discharges in relation to pre-development discharges.
- **4.7 (c)(2):** Develop a list of stormwater measures/standards for use within the MS4.
- **4.7 (c)(4):** Measures that are defined as "Class V Injection Wells" are required to be registered with U.S. EPA.

Section 4.7: Post-Construction Site Stormwater Run-Off MCM (Cont'd.)

- **4.7 (c)(6):** Utilize, where appropriate, any combination of practices or controls that promote volume reduction, infiltration, filtering, harvesting, evapotranspiration, vegetative practices or alternative treatment systems to reduce the impact of pollutants. The following standards are required and must be utilized:
- **4.7 (c)(6)(A) and (B):** Clarified the use of infiltration measures in wellhead protection areas to be used when there is pre-treatment of the run-off for the pollutant(s) of concern. This is how the current rule is administered, but the new language clarifies this approach.
- **4.7 (c)(6)(A) and (B):** The discharge of run-off into sinkholes or through infiltration measures in wellhead protection areas now requires pre-treatment, but we have eliminated the reference to Indiana ground water quality standards as referenced in 327 IAC 2-11.
- **4.7 (c)(6)(D):** The requirement for new retail gasoline outlets and new MS4 fueling areas has an added provision that is applies to all of these facilities regardless of size. This addition clarifies the current Rule language and how this item has been administered.
- **4.7 (c)(7):** The permit adds a list of water quality and watershed protection elements that are to be administered by the 5th year of coverage. These items must be used in decision making processes and where applicable incorporated into ordinances. Additions beyond the current Rule include:
 - Preserving, protecting, creating, and restoring ecologically sensitive areas.
 - Consideration of thermal impacts related to run-off.
 - Avoidance to the impact of natural waterbodies.
 - Avoidance of development in areas susceptible to erosion based on terrain.
 - Implementation of standards to protect trees and other vegetation.
 - Implementation of policies that reduce stormwater and non-stormwater discharges through stormwater systems.
 - Implementation of policies that encourage practices for stormwater management close to the source of the concern rather than downstream.
- **4.7 (d) (1-4):** This item is related to development of operational and maintenance of post-construction measures. The current Rule only requires a development and implementation of a written operational and maintenance plan. The new permit expands on this concept by providing specific and more detailed language.
- **4.7 (e) and (f):** Adds a specific requirement to inspect post-construction measures to ensure long-term functionality. The current Rule implies this based on the requirement that a MS4 develop a written plan. The following requirements have been added:
 - Develop a form, checklist, etc. to document status of the measures and a method to notify responsible individuals.
 - Inspect 100% of all measures owned and operated by the MS4 and 50% of those operated by private entities during the permit cycle.
- **4.7 (h):** The signed certification for a new MS4 must be submitted 548 days following submittal of a NOI. This timeline has been reduced from 730 days that is in the current Rule.
- **4.7 (j):** Conduct and/or provide annual training for MS4 staff. Training must be tracked and maintained by the MS4.
- **4.7 (k):** The MCM lists specific items that must be in the Annual Report. Reportable goals from the current Rule have not changed with the exception of the following.
 - Updates to the post-construction ordinance.
 - Number of sites requiring post-construction measures.

Eliminated the requirement: Identify the number and location of new retail gasoline outlets or municipal, state, federal, or institutional refueling areas, or outlets or refueling areas that replaced existing tank systems that have installed storm water BMPs.

Draft MS4 GP Section 4.8: Good Housekeeping MCM

This MCM has been reorganized into sections that address municipal facilities and MS4 owned/operated infrastructure.

- **4.8 (b):** Requires the MS4 to develop and maintain an inventory map of all owned and operated facilities. The Section includes a list of items that must be included in the inventory.

Draft MS4 GP Section 4.8: Good Housekeeping MCM (Cont'd.)

- **4.8 (c):** Requires the MS4 to complete an annual assessment of all MS4 owned and/or operated facilities. The section includes requirements for the assessment.
- **4.8 (d):** Requires the MS4 to develop a SWPPP for each facility. The Section includes information that is required to be in the SWPPP.
- **4.8 (f):** Requires that each SWPPP be reviewed once annually and updated.
- **4.8 (g)(1):** Requires that a weekly visual inspection be conducted at each facility and documented.
- **4.8 (g)(2):** Requires that quarterly inspections are conducted at high priority facilities [4.8 (b)(4)]. Inspections must be documented.
- **4.8 (h):** Requires the MS4 develop a written operation and maintenance plan for MS4 owned and/or operated infrastructure. The Section requires specific elements and requirements that must be in the plan.
- **4.8 (i):** The signed certification for a new MS4 must be submitted 365 days following submittal of a NOI. This timeline has not changed from what is required in the current Rule.
- **4.8 (k):** Ensure that contractors operating on behalf of the MS4 are contractually required to comply with provisions and requirements of the Good Housekeeping MCM.
- **4.8 (n):** The MCM lists specific items that must be in the Annual Report. Reportable goals from the current Rule have not changed with the exception of the following.
 - Summary of all activities and procedures for the operation and maintenance program including, but not limited to: facility assessment, facility specific maintenance activities, storm sewer maintenance, and flood management projects.

Eliminated the requirement: Estimated or actual amount, in tons, of salt and sand used for snow and ice control.

Eliminated the requirement: If applicable, number or percentage and location of canine parks sited at least one hundred fifty (150) feet away from a surface waterbody.

Eliminated the requirement: Number and location of MS4 entity facilities that have containment for accidental releases of stored polluting materials.

Eliminated the requirement: Estimated or actual acreage or square footage, amount, and location where pesticides and fertilizers are applied by a regulated MS4 entity to places where storm water can be exposed within the MS4 area.

Eliminated the requirement: Estimated or actual linear feet or percentage and location of un-vegetated swales and ditches that have an appropriately sized vegetated filter strip.

Draft MS4 GP Section 5.0: Water Quality-Based Effluent Limitations

When the MS4 determines that it is subject to an applicable approved Total Maximum Daily Load (TMDL) Waste Load Allocation (WLA) prior to the effective date of this permit, the following requirements apply:

- **5.1 (c)(1):** The MS4 will implement a program component that works towards calculating and quantifying the estimated current loading(s) of the pollutant(s) of concern to the impaired waterbody.
- **5.1 (c)(2):** The MS4 must determine if, based on the estimated current loading(s), it is meeting the applicable WLA with current stormwater controls and practices. When loading reductions are needed in order to achieve the applicable WLA, the MS4 must update its SWQMP to incorporate appropriate stormwater management measures that will be implemented to reduce loadings of the pollutant(s) of concern and achieve the applicable WLA.
- **5.1 (c)(3):** The SWQMP must:
 - (A) Specifically identify the additional or enhanced stormwater management measures necessary to reduce the loadings of the pollutant(s) of concern.
 - (B) Document the modeling and/or calculations used to determine reduction measures.
 - (C) Define an implementation schedule which should occur as quickly as possible.



This Fact Sheet on IDEM's proposed MS4 General Permit is a summary of comments solicited by INAFSM and compiled by Christopher B. Burke Engineering, LLC.

