# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
# ANNUAL FACILITY INSPECTION REPORT
# NPDES PERMIT FOR STORM WATER DISCHARGES
# FROM MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)

Complete each section of this report.

| REPORT PERIOD: | FROM: MARCH 2018 | TO: MARCH 2019 |
|---|---|---|

MS4 OPERATOR INFORMATION: (As it appears on the current permit)

| NAME: City of Crystal Lake | | TELEPHONE NUMBER: 815-459-2020 |
|---|---|---|
| MAILING ADDRESS: 100 Woodstock Street | | |
| CITY: Crystal Lake | STATE: IL | ZIP: 60039 |
| CONTACT PERSON: Michael Magnuson<br>(Person responsible for Annual Report) | | |

NAME(S) OF GOVERNMENTAL ENTITY(IES) IN WHICH MS4 IS LOCATED: (As it appears on the current permit)

| McHenry County | |
|---|---|
| | |

THE FOLLOWING ITEMS MUST BE ADDRESSED.

A. CHANGES TO BEST MANAGEMENT PRACTICES (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

| | | | |
|---|---|---|---|
| 1. Public Education and Outreach | ☐ | 4. Construction Site Runoff Control | ☐ |
| 2. Public Participation/Involvement | ☐ | 5. Post-Construction Runoff Control | ☐ |
| 3. Illicit Discharge Detection & Elimination | ☐ | 6. Pollution Prevention/Good Housekeeping | ☐ |

B.
Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.

C.
Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

D.
Attach a summary of the storm water activities you plan to undertake during the next reporting cycle ( including an implementation schedule.)

E.
Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

F.
Attach a list of construction projects that your entity has paid for during the reporting period.

| SIGNATURE: | DATE: May 23, 2019 |
|---|---|

Information required by this form must be provided to comply with 415 ILCS 5/39 (1996). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

IL 532 2585
WPC 691 JANUARY-2003

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# Part A. Changes to Best Management Practices

**Note: X indicates BMPs performed that were proposed in your NPDES permit**
**✓ indicates changes to BMPs proposed in your NPDES permit**

| Year 16 | Year 17 | Year 18 | Year 19 | Year 20 | MS4 |
|---|---|---|---|---|---|
| **A. Public Education and Outreach** | | | | | |
| X | X | X | X | X | A.1 Distributed Paper Material |
| | | | | | A.2 Speaking Engagement |
| X | X | X | X | X | A.3 Public Service Announcement |
| X | X | X | X | X | A.4 Community Event |
| | | | | | A.5 Classroom Education Material |
| X | X | X | X | X | A.6 Other Public Education |
| | | | | | |
| **B. Public Participation/Involvement** | | | | | |
| | | | | | B.1 Public Panel |
| X | X | X | X | X | B.2 Educational Volunteer |
| X | X | X | X | X | B.3 Stakeholder Meeting |
| | | | | | B.4 Public Hearing |
| | | | | | B.5 Volunteer Monitoring |
| X | X | X | X | X | B.6 Program Coordination |
| X | X | X | X | X | B.7 Other Public Involvement |
| | | | | | |
| **C. Illicit Discharge Detection and Elimination** | | | | | |
| X | X | X | X | X | C.1 Storm Sewer Map Preparation |
| X | X | X | X | X | C.2 Regulatory Control Program |
| X | X | X | X | X | C.3 Detection/Elimination Prioritization Plan |
| X | X | X | X | X | C.4 Illicit Discharge Tracing Procedures |
| X | X | X | X | X | C.5 Illicit Source Removal Procedures |
| X | X | X | X | X | C.6 Program Evaluation and Assessment |
| X | X | X | X | X | C.7 Visual Dry Weather Screening |
| X | X | X | X | X | C.8 Pollutant Field Testing |
| | | | | | C.9 Public Notification |
| | | | | | C.10 Other Illicit Discharge Controls |

| Year 16 | Year 17 | Year 18 | Year 19 | Year 20 | MS4 |
|---|---|---|---|---|---|
| **D. Construction Site Runoff Control** | | | | | |
| X | X | X | X | X | D.1 Regulatory Control Program |
| X | X | X | X | X | D.2 Erosion and Sediment Control BMPs |
| | | | | | D.3 Other Waste Control Program |
| X | X | X | X | X | D.4 Site Plan Review Procedures |
| X | X | X | X | X | D.5 Public Information Handling Procedures |
| X | X | X | X | X | D.6 Site Inspection/Enforcement Procedures |
| | | | | | D.7 Other Construction Site Runoff Controls |
| | | | | | |
| **E. Post-Construction Runoff Control** | | | | | |
| | | | | | E.1 Community Control Strategy |
| X | X | X | X | X | E.2 Regulatory Control Program |
| X | X | X | X | X | E.3 Long Term O&M Procedures |
| X | X | X | X | X | E.4 Pre-Const Review of BMP Designs |
| X | X | X | X | X | E.5 Site Inspections During Construction |
| | | | | | E.6 Post-Construction Inspections |
| | | | | | E.7 Other Post-Const Runoff Controls |
| | | | | | |
| **F. Pollution Prevention/Good Housekeeping** | | | | | |
| X | X | X | X | X | F.1 Employee Training Program |
| X | X | X | X | X | F.2 Inspection and Maintenance Program |
| X | X | X | X | X | F.3 Municipal Operations Storm Water Control |
| X | X | X | X | X | F.4 Municipal Operations Waste Disposal |
| X | X | X | X | X | F.5 Flood Management/Assess Guidelines |
| X | X | X | X | X | F.6 Other Municipal Operations Controls |

## Part B. Status of Compliance with Permit Conditions

***(Provide the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable [MEP], and your identified measurable goals for each of the minimum control measures.)***

The status of BMPs and measurable goals performed in Year 16 are described below. The City submitted a new Notice of Intent during Year 16 that more accurately reflects the current program activities and subsequent Annual Reports will be based on the new NOI.

### 1) PUBLIC EDUCATION AND OUTREACH

The City and McHenry County both perform a variety of activities that meet the requirements of the Public Education and Outreach minimum control measure. These activities include BMP's A.1, A.3, A.4 and A.6. A brief description and status is provided below.

**BMP No.** A.1 – Distibuted Paper Material
**Brief Description of BMP:**
The City of Crystal Lake (City) and McHenry County will continue to produce and make available brochures on a variety of stormwater related topics. These brochures and informational materials are made available for the public at the City facilities and events.

**BMP No.** A.3 – Public Service Announcement
**Brief Description of BMP:**
The City will continue to include a stormwater and/or ambient water quality related articles in the City's monthly newsletter at least once a year.

**BMP No.** A.4 – Community Event
**Brief Description of BMP:**
The City has designed and constructed a rain garden with the Wildflower Preservation and Propagation Committee. The City will continue to maintain the existing rain garden as an educational and demonstration tool and seek out additional partnerships as funding allows. The City has also attended and supported the annual Drug Take Back Initiative Program sponsored by the Police Department. This provides an opportunity to engage the public on stormwater related issues. The City will also continue this outreach activity.

**BMP No.** A.6 – Other Public Involvement
**Brief Description of BMP:**
The City will continue to utilize other available outlets such as the City website, library, etc. to reach residents regarding stormwater and water quality information. The City will update and modify their approach as need to stay current and keep residents informed.

### 2) PUBLIC PARTICIPATION AND INVOLVEMENT

The City and McHenry County both perform a variety of activities that meet the requirements of

the Public Participation and Involvement minimum control measure. These activities include BMP's B.2, B.3, B.6 and B.7. A brief description and status is provided below.

**BMP No.** B.2, – Educational Volunteer

**Brief Description of BMP:**
The City regularly participates in volunteering activities that provide opportunities to interact with residents and educate them on the importance of stormwater and water quality. City staff will continue to perform these activities and work to increase participation from its staff and attendance by residents.

**BMP No.** B.3 – Stakeholder Meeting

**Brief Description of BMP:**
The City will work to conduct stakeholder meetings to connect directly with impacted residents and distribute information. The City will continue to hold the stakeholder meetings as needed with a goal of at least one per year as required by the permit. The City is actively involved in the newly formed Silver and Sleepy Hollow Creeks Watershed Coalition including attending the monthly meetings.

**BMP No.** B.6 – Program Involvement

**Brief Description of BMP:**
The City has coordinated with other local municipalities and agencies on regional stormwater related issues. The City will continue to partner with the County and other agencies to coordinate efforts such as watershed studies and other regional issues impacting multiple jurisdictions.

**BMP No.** B.7 – Other Public Involvement

**Brief Description of BMP:**
The City has hosted elementary schools and other residents with tours through various City departments. These tours allow the City to educate the participants on various functions of the City, as well as educate them on issues pertaining to stormwater and water quality, such as what is the difference between stormwater and sanitary and why keeping them separate is important. The age groups for the tours ranged from elementary through college.

### 3) ILLICIT DISCHARGE DETECTION AND ELIMINATION

The City and McHenry County both perform a variety of activities that meet the requirements of the Illicit Discharge Detection and Elimination minimum control measure. These activities include BMP's C.1, C.2, C.3, C.4, C.5, C.6, C.7, and C.8. A brief description and status is provided below.

**BMP No.** C.1 – Storm Sewer Map Preparation

**Brief Description of BMP:**
The City is working to develop an extensive, GIS based storm sewer atlas map and inventory of the storm sewer system outfalls. The City will continue the work to update the system and inventory as needed based on development and other stormwater improvements. The City is moving forward with the plans and commitment to develop the system and is currently updating the GIS consortium to include the outfall locations.

**BMP No.** C.2 – Regulatory Control Program

**Brief Description of BMP:**
The City and County both have ordinances in place to allow for enforcement action if an illicit discharge is observed, reported or discovered. The City will continue to enforce the ordinance to prevent or eliminate non-stormwater discharges from the municipal separate storm sewer system.

**BMP No.** C.3 – Detection/Elimination Prioritization Plan

**Brief Description of BMP:**
The City has policies and procedures to identify, trace, and eliminate illicit discharges, as well as addressing those potential illicit discharges reported by the public. The City will continue these activities to reduce or eliminate illicit discharges to the municipal separate storm sewer system. The City has implemented an Inflow and Infiltration (I/I) Program to identify and eliminate cross connections to the sanitary sewer system. These programs reduce the potential for surcharging of sanitary sewers and the potential discharge of sanitary waste into the MS4.

**BMP No.** C.4 – Illicit Discharge Tracing Procedures

**Brief Description of BMP:**
The City has existing policies and procedures in place to trace and eliminate illicit discharges to the municipal separate storm sewer system. These procedures include the utilization of the GIS outfall mapping system, existing design plans and other available data to locate the source of potential pollutants. The City will continue these tracing activities as needed to reduce or eliminate non-stormwater discharges to the MS4.

**BMP No.** C.5 – Illicit Source Removal Procedures

**Brief Description of BMP:**
The City and County both have regulatory mechanisms in place to allow for enforcement actions to eliminate illicit discharges. The City will continue to utilize these procedures as needed to eliminate non-stormwater discharges to the MS4.

**BMP No.** C.6 – Program Evaluation and Assessment

**Brief Description of BMP:**
The City will continue to conduct the annual program evaluation and assessment for the IDDE program. The evaluation and assessment provides awareness and opportunity for improvement to the policies and procedures based on experience and staff feedback.

**BMP No.** C.7 – Visual Dry Weather Screening

**Brief Description of BMP:**
The City regularly performs dry weather screening of the municipally owned outfalls for potential stormwater concerns as part of its maintenance activities. The City will continue to perform these activities and has developed a form for formalizing this process. The City will continue to perform these activities and utilize the inspection form for future permit years.

**BMP No.** C.8 – Pollutant Field Testing

**Brief Description of BMP:**
The City regularly samples, tests, analyzes and documents the results of influent and effluent flow to various waterbodies throughout the community as part of an ongoing monitoring and assessment program. These procedures provide a baseline condition for these natural resources in the event of a potential illicit discharge. The City will continue these procedures in future permit years as funding allows. Additional information is provided in Part C of this report.

## 4) CONSTRUCTION SITE RUNOFF CONTROL

The City and McHenry County both have ordinances and activities in place that meet the requirements of the Construction Site Runoff Control minimum control measure. These activities include BMP's D.1, D.2, D.4, D.5, and D.6. A brief description and status is provided below.

**BMP No.** D.1 – Regulatory Control Program

**Brief Description of BMP:**
The City and County have ordinances in place to require the review, inspection and enforcement of construction site runoff controls. The City will continue with these policies/procedures and update as needed based on the impending MS4 permit.

**BMP No.** D.2 – Erosion and Sediment Control BMPs

**Brief Description of BMP:**
The City and County have ordinances in place to require the review, inspection and enforcement of soil erosion and sediment control best management practices. The City will continue these procedures to reduce or prevent the discharge of soil and other potential pollutants from construction sites and amend as needed based on the impending permit.

**BMP No.** D.4 – Site Plan Review Procedures

**Brief Description of BMP:**
The City has procedures that require the review of site plan for proposed developments for compliance. The City will continue the review procedures for developments to verify compliance with applicable NDPES regulations.

**BMP No.** D.5 – Public Information Handling Procedures

**Brief Description of BMP:**
The City has procedures in place to receive, log and address publicly reported issues. The City will continue these procedures and respond and/or investigate as needed.

**BMP No.** D.6 – Site Inspection/Enforcement Procedures

**Brief Description of BMP:**
The City and County regulatory control programs all for the inspection and enforcement for construction site runoff control. The City and County will continue the inspection and enforcement program to prevent the discharge of pollutants from construction sites.

## 5) POST-CONSTRUCTION RUNOFF CONTROL

The City and McHenry County both have ordinances and activities in place that meet the requirements of the Post-Construction Runoff Control minimum control measure. These activities include BMP's E.2, E.3, E.4, and E.5. A brief description and status is provided below.

**BMP No.** E.2 – Regulatory Control Program

**Brief Description of BMP:**
The City and County have ordinances in place that require the review, inspection and enforcement of post-construction runoff control measures. The City will continue to enforce the ordinances and verify compliance of all developments following construction to reduce or prevent the discharge of pollutants to the MS4.

**BMP No.** E.3 – Long Term O&M Procedures

**Brief Description of BMP:**
The City has procedures for assisting and evaluating long term maintenance of stormwater best management practices. The City will continue to assist developers, residents and other target audiences by providing sample maintenance plans and conducting inspections as needed.

**BMP No.** E.4 – Pre-Construction Review of BMP Designs

**Brief Description of BMP:**
The City's existing practices include the pre-construction review of BMP designs. These procedures include pre-application meetings for large scale developments. The City will continue the review procedures and modify as necessary to maintain compliance.

**BMP No.** E.5 – Site Inspections During Construction

**Brief Description of BMP:**

The City performs site inspections during and after construction at new development and redevelopment projects to verify compliance with the runoff control requirements. The City will continue these procedures aimed at preventing the discharge of pollutants to the MS4.

## 6) POLLUTION PREVENTION AND GOOD HOUSEKEEPING

The City and McHenry County perform a number of activities that meet the requirements of the Pollution Control and Good Housekeeping minimum control measure. These activities include BMP's F.1, F.2, F.3, F.4, F.5 and F.6. A brief description and status is provided below.

**BMP No.** F.1 – Employee Training Program

**Brief Description of BMP:**
The City has procedures that provide guidance and training for employees to reduce or eliminate the discharge of pollutants from City owned facilities to the storm sewer system. The City will continue the training program and maintains current certifications for pesticide applications.

**BMP No.** F.2 - Inspection and Maintenance Program

**Brief Description of BMP:**
The City has an inspection and maintenance program in place to evaluate and maintain the municipal stormwater facilities. These activities include the City's extensive street sweeping program and storm sewer inspection and maintenance program. During permit Year 16, the City staff cleaned approximately 415 LF of storm sewer and an additional 6035 LF was cleaned by contractors. The City will continue this program which reduced the amount of debris and other potential pollutants entering the municipal separate storm sewer system.

**BMP No.** F.3 – Municipal Operations Storm Water Control

**Brief Description of BMP:**
The City has procedures and policies to prevent the discharge of pollutants to the MS4 from municipal operations. These policies include dewatering procedures, pumping activities and waste disposal. The City will continue these operations and re-evaluate and/or modify as needed to prevent the discharge of pollutants to the MS4.

**BMP No.** F.4 – Municipal Operations Waste Disposal

**Brief Description of BMP:**
The City has procedures that require the appropriate disposal of all wastes generated during municipal operations. The City will continue these procedures as needed to maintain compliance with the disposal program.

**BMP No.** F.5 – Flood Management/Assess Guidelines

**Brief Description of BMP:**

The City, County, and State have development procedures related to floodplain management and the evaluation of potential development in these areas. The City will continue to enforce these requirements in special flood hazard areas and update as needed to maintain compliance.

**BMP No.** F.6 – Other Municipal Operations Controls

**Brief Description of BMP:**
The City regularly evaluates their municipal activities for additional ways to reduce or eliminate pollutants from entering the stormwater system including salt reduction, additional de-icing techniques and other actions. The City will continue to analyze their existing practices and methods for potential alternatives that may reduce or eliminate potential pollutants.

# Part C. Information and Data Collection Results

***(Provide information and water quality sampling/monitoring data related to illicit discharge detection and elimination collected during the reporting period.)***

**Illicit Discharge Detection and Elimination:**
**(April 1, 2018 thru March 2019)**

## 1) Businesses and Commercial Areas

- Pauly Toyota – November 5, 2018

A leaking auto parts delivery van was observed leaking oil at the Pauly Toyota parking lot dealership (1035 S. Illinois Route 31). The van had leaked oil from the Volkswagen dealership at (5213 Northwest Hwy) to the Toyota dealership. The Crystal Lake Fire Department responded to the scene and oil dry absorbent was used in several places to contain the spilled material. It was determined that there were no storm sewers affected.

- Diesel Redemption (6207 Commercial Road) November (2018) & March (2019)

This facility is a junk yard for old buses and ambulances. Engines are removed from the vehicle bodies and restored. The nature of the business creates oil spills and petroleum residuals. Such was reported in November 2018 where the adjacent property owner complained of runoff into his property. The business was warned that future incidents could result in violations and fines.

A substantial fire occurred at this business on March 19, 2019. An Emergency Response contractor was dispatched to this location to mitigate suspected petroleum releases associated with IEMA incident number 2019-0265 by order of the IEPA. Containment hydrocarbon absorbents and a vacuum tanker truck were used to remove water that accumulated during the fire suppression. Nearby storm drains and runoff ditches were blocked off during and after the fire. Soil samples were also collected and analyzed for BTEX. The responding contractor did not find any obvious evidence of a petroleum release to justify the issuance of an IEMA incident number.

## 2) Domestic Sources

- Stone Creek Circle – July 10, 2018

A citizen's complaint was filed for petroleum stains caused from a hydraulic leak from a Prairieland garbage truck. Residual stains were observed down the entire roadway. The material was dry and nearby storm sewers did not appear to be affected. Prairieland indicated they would correct this problem to prevent future incidents of this nature.

- Barlina Place Paint Discharge – September 27, 2018

City personnel observed a contractor painting townhomes and cleaning brushes in a grassy area over a storm water manhole behind the townhome complex. The contractor was informed that this was a storm water code violation and a ticket would be issued if this practice was continued. They said they would comply with the order.

**3) Storm Water Receiving Bodies – Monitoring**

- Crystal Lake – samples are collected quarterly at the following locations:

  - Cove Pond discharge pipe into the lake off of North Shore Drive*
  - Lake influent into Crystal Creek at Riverside Dr. and Lake Avenue
  - Pinewood and Honeysuckle Dr.at manhole inlet into Crystal Lake
  - Effluent discharge manhole from Lippold Park wetlands (off Thornwood Lane)
  - Influent discharge manhole adjacent to Lippold Park golf driving range and wetlands (collected quarterly)
  - Lippold Park – East, Center, and West (all are adjacent to Route 176)

  * Cove Pond
    - Influent culvert pipe into Cove Pond near Green Oaks Drive / Crystal Lake Avenue
    - Effluent discharge pipe from Cove Pond along North Shore Drive

- Groundwater Monitoring
  - Six (6) watershed wells northwest of Crystal Lake are sampled quarterly.

Note: Water elevations are recorded at some of the above locations during the monitoring events. Water volumes and depths are recorded at each well location.

The parameters analyzed at the above locations include the following:
- Total Suspended Solids (TSS)
- Carbonaceous Biological Oxygen Demand (CBOD)
- Ammonia-N
- Total Phosphorous
- Fecal Coliform
- Total Coliform
- Chlorides
- Metals

**The following locations from the wastewater plants are sampled as required or weekly:**

1) Drainage Ditch to Squaw Creek /unnamed ditch to Sleepy Hollow along railroad tracks, downstream from Sanitary Treatment Plant #3 ***(collected when chlorine residual is tested at the Plant Effluent)***.* Parameters include the following:

- Temperature
- pH
- Chlorine residual*

2) Sanitary Treatment Plant #2 (collected once per week) – Crystal Creek (Upstream), (Cooling Pond Outfall to Crystal Creek), and Downstream

***Note: This will be changed to monthly after the new NPDES Permit takes affect***

The parameters analyzed in the receiving stream include the following:

- Dissolved Oxygen (DO)
- Ammonia-N
- Total Phosphorous
- Total Suspended Solids (TSS)
- TKN (Monthly)

**The following locations into Sleepy Hollow Creek from Wastewater Plant #3 are sampled quarterly:**

1) Effluent to Drainage Ditch (Squaw Creek / unnamed ditch to Sleepy Hollow)
3) Terra Cotta Road downstream of drainage pond
4) Illinois Route 31 north of east Brighton Lane
5) Illinois Route 31 between Squaw Creek Road and Half Mile Road
6) Along Ames Road downstream of Thunderbird Lake
7) Where Sleepy Hollow crosses on Colby Point Road

The parameters analyzed for Sleepy Hollow Creek include the following:

- Total Phosphorous
- Sulfate
- Chloride
- Total Dissolved Solids (TDS)
- Total Suspended Solids (TSS)
- Hardness
- pH
- Temperature
- Total Nitrogen

**Water samples are collected once per month from Silver Creek and Sleepy Hollow Creek as part of the Fox River Study and managed by the Friends of the Fox**

1) Silver Creek - Lake Shore Drive and East Park Lane
2) Sleepy Hollow Creek – Colby Point Road

## Other Receiving Waters with no Documented Monitoring

- Kishwaukee River
- Hampton Hills Unnamed Wetlands
- Woods Creek – North & South Branches
- Veterans Acres Pond

## Part D. Summary of Year 17 Stormwater Activities

***(Present a summary of the storm water activities you plan to undertake during the next reporting cycle, including an implementation schedule in the sections following the table.)***

The table shown below summarizes the BMPs committed to for Year 17. Specific BMPs and measurable goals for Year 17 program development activities are presented in the sections following the table. **The City submitted a new Notice of Intent during Year 16 to more accurately reflect the current program activities and subsequent Annual Reports will be based on the new NOI.**

**Note: X indicates BMPs committed to for Year 17.**

| Year 17 MS4 | |
|---|---|
| **A. Public Education and Outreach** | |
| X | **A.1 Distributed Paper Material** |
| | **A.2 Speaking Engagement** |
| X | **A.3 Public Service Announcement** |
| X | **A.4 Community Event** |
| | **A.5 Classroom Education Material** |
| X | **A.6 Other Public Education** |
| | |
| **B. Public Participation/Involvement** | |
| | **B.1 Public Panel** |
| X | **B.2 Educational Volunteer** |
| X | **B.3 Stakeholder Meeting** |
| | **B.4 Public Hearing** |
| | **B.5 Volunteer Monitoring** |
| X | **B.6 Program Coordination** |
| X | **B.7 Other Public Involvement** |
| | |
| **C. Illicit Discharge Detection and Elimination** | |
| X | **C.1 Storm Sewer Map Preparation** |
| X | **C.2 Regulatory Control Program** |
| X | **C.3 Detection/Elimination Prioritization Plan** |
| X | **C.4 Illicit Discharge Tracing Procedures** |
| X | **C.5 Illicit Source Removal Procedures** |
| X | **C.6 Program Evaluation and Assessment** |
| X | **C.7 Visual Dry Weather Screening** |
| X | **C.8 Pollutant Field Testing** |
| | **C.9 Public Notification** |
| | **C.10 Other Illicit Discharge Controls** |

| Year 17 MS4 | |
|---|---|
| **D. Construction Site Runoff Control** | |
| X | **D.1 Regulatory Control Program** |
| X | **D.2 Erosion and Sediment Control BMPs** |
| | **D.3 Other Waste Control Program** |
| X | **D.4 Site Plan Review Procedures** |
| X | **D.5 Public Information Handling Procedures** |
| X | **D.6 Site Inspection/Enforcement Procedures** |
| | **D.7 Other Construction Site Runoff Controls** |
| | |
| **E. Post-Construction Runoff Control** | |
| | **E.1 Community Control Strategy** |
| X | **E.2 Regulatory Control Program** |
| X | **E.3 Long Term O&M Procedures** |
| X | **E.4 Pre-Const Review of BMP Designs** |
| X | **E.5 Site Inspections During Construction** |
| | **E.6 Post-Construction Inspections** |
| | **E.7 Other Post-Const Runoff Controls** |
| | |
| **F. Pollution Prevention/Good Housekeeping** | |
| X | **F.1 Employee Training Program** |
| X | **F.2 Inspection and Maintenance Program** |
| X | **F.3 Municipal Operations Storm Water Control** |
| X | **F.4 Municipal Operations Waste Disposal** |
| X | **F.5 Flood Management/Assess Guidelines** |
| X | **F.6 Other Municipal Operations Controls** |

## 1. Public Education and Outreach

The City is committing to conduct Public Education and Outreach as part of its permit. Public Education and Outreach requires implementation of a program to distribute educational material to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants to stormwater runoff. The City commits to implementation of BMPs related to A.1, A.3, A.4 and A.6 as described below.

**BMP No.** A.1
**Brief Description of BMP:**

The City and McHenry County distribute a variety of paper materials from a number of sources informing the public about stormwater or water quality and why they are important.

**Measurable Goal(s), including frequencies:**

The materials chosen will be targeted toward residents, businesses and other potential pollutant sources to create better awareness and knowledge of the issue.

**Milestones:** **Year 17:** The City will continue to distribute the educational materials and will work to increase distribution by 5%.

**BMP No.** A.3
**Brief Description of BMP:**

The City publishes information about stormwater or water quality in the City newsletter and on the City website.

**Measurable Goal(s), including frequencies:**

The articles chosen will be selected to increase the resident's knowledge and awareness regarding stormwater and water quality.

**Milestones:** **Year 17:** Publish information articles in the City newsletter at least once a year.

**BMP No.** A.4
**Brief Description of BMP:**

The City has designed and constructed a rain garden with the Wildflower Preservation and Propagation Committee (WPPC). The City will also continue its presence and support for the annual Drug Take Back Initiative Program sponsored by the Police Department. This activity provides another opportunity to engage the public on stormwater related issues and why they are important to all residents and businesses.

**Measurable Goal(s), including frequencies:**

The City will continue to maintain and enhance the rain garden as an education tool for residents and to demonstrate their value for managing stormwater runoff.

**Milestones:** **Year 17:** Maintain existing rain garden and seek additional partnerships as funding allows.

**BMP No.** A.6

**Brief Description of BMP:**

The City will utilize other means such as the City website, library, etc. as conduits for reaching additional residents.

**Measurable Goal(s), including frequencies:**

The City will provide specific information to the targeted residents on stormwater and water quality issues.

**Milestones:** **Year 17:** The City will update and modify the information provided as needed to stay current and informative.

## 2. Public Participation/Involvement

The City will perform activities and services related to the Public Participation/Involvement minimum control measure. BMPs will be implemented under BMP numbers B.2, B.3, B.4, B.6 and B.7 as described below.

**BMP No.** B.2

**Brief Description of BMP:**

City staff regularly participates in volunteering activities that provide opportunities to interact with residents and educate them on the importance of stormwater and water quality.

**Measurable Goal(s), including frequencies:**

City staff will continue to perform these activities and work to increase participation from its staff and attendance by residents.

**Milestones:** **Year 17:** The City will participate in at least one volunteering activity each year and work to increase attendance by 5%.

**BMP No.** B.3

**Brief Description of BMP:**

The City will work to conduct stakeholder meetings as needed to connect directly with impacted residents and to distribute information.

**Measurable Goal(s), including frequencies:**

Stakeholder meetings offer direct input on issues impacting residents and provide an opportunity to gather feedback as well as disseminate stormwater related information.

**Milestones:** **Year 17:** The City will work to hold one stakeholder meeting.

**BMP No.** B.4

**Brief Description of BMP:**

The City will hold a public meeting to discuss topics including steps the public can take to reduce pollutants to stormwater runoff or the impacts of stormwater runoff on local water bodies.

**Measurable Goal(s), including frequencies:**

The goal is to increase public education and involvement regarding the City's stormwater management and NDPES program and their knowledge on ways they can help.

**Milestones:** **Year 17:** The City will work to hold one public meeting each permit year.

**BMP No.** B.6

**Brief Description of BMP:**

The City has coordinated with other local municipalities and agencies on regional stormwater related issues. The City has been attending and participating in the Fox River Study Group monthly meetings. The City is also a member of the Silver Creek and Sleepy Hollow Creek Watershed planning coalition.

**Measurable Goal(s), including frequencies:**

The City will continue to partner with the County and other agencies to coordinate efforts such as watershed studies and other issues that impact more than one individual municipality.

**Milestones:** **Year 17:** The City will work to coordinate with other local agencies regarding stormwater related issues.

**BMP No.** B.7

**Brief Description of BMP:**

The City has hosted elementary schools and other residents with tours through various departments of the City.

**Measurable Goal(s), including frequencies:**

The tours allow the City to educate the participants on the various functions of the City, as well as specifically provide them with knowledge of stormwater vs sanitary, why we treat sanitary and why keeping stormwater is important. This year school groups were given tours and conduct water monitoring for their science classes at Sanitary Treatment Plant #2 in the receiving stream (Crystal Creek). The City of Crystal Lake made a monetary contribution to the Friends of the Fox so they can continue these environmental education practices.

School Group Participation:

- **Bernotas Middle School – Crystal Creek (WWTP #2), 12 sessions 285 students**
- **Lundahl Middle School – 245 students**

**Milestones:** **Year 17:** The City will continue with the education tour program for students ranging from elementary to college ages.

**3. Illicit Discharge Detection and Elimination**

The City commits to performing some activities related to the Illicit Discharge Detection and Elimination minimum control. BMPs will be implemented under BMP numbers C.1, C.2, C.3, C.4, C.5, C.6, C.7 and C.8 as described below.

**BMP No.** C.1

**Brief Description of BMP:**
The City has a GIS based mapping system of the receiving streams and outfalls.

**Measurable Goal(s), including frequencies:**
The City will work to finalize the GIS system and outfall inventory mapping.

**Milestones:** **Year 17:** The City will complete 20% more of the mapping and outfall inventory.

**BMP No.** C.2

**Brief Description of BMP:**
The City and County have ordinances in place to allow for regulatory action if an illicit discharge is observed, reported or discovered.

**Measurable Goal(s), including frequencies:**
The City will continue to enforce the existing ordinances that prevent non-stormwater discharges to reduce or eliminate pollutants from entering the municipal separate storm sewer system.

**Milestones:** **Year 17:** The City will continue to enforce the existing ordinances.

**BMP No.** C.3

**Brief Description of BMP:**
The City utilizes various departments to identify and report potential illicit discharges. The City also investigates reports of illicit discharges.

**Measurable Goal(s), including frequencies:**
The City will continue to identify and investigate potential illicit discharges to reduce or eliminate the impact on local stormwater systems and receiving streams.

**Milestones:** **Year 17:** The City will continue to identify and investigate potential illicit discharges.

**BMP No.** C.4

**Brief Description of BMP:**

The City uses all information available including development plans and the GIS system to trace and eliminate illicit discharges.

**Measurable Goal(s), including frequencies:**

The City will track, investigate and eliminate illicit discharges as reported, observed or identified

**Milestones:** **Year 17:** The City will trace and eliminate illicit discharges as needed.

**BMP No.** C.5

**Brief Description of BMP:**

The City and County both have enforcement procedures in place to assist with the removal of an identified illicit discharge.

**Measurable Goal(s), including frequencies:**

The City will utilize enforcement procedures as needed to eliminate illicit discharges to reduce or eliminate the amount of pollutants entering the municipal separate storm sewer system.

**Milestones:** **Year 17:** The City will utilize enforcement procedures as needed to eliminate illicit discharges.

**BMP No.** C.6

**Brief Description of BMP:**

The City will evaluate the illicit discharge and detection program for effectiveness and possible improvements.

**Measurable Goal(s), including frequencies:**

Regular evaluation of the program can provide valuable input and opportunity for improvement.

**Milestones:** **Year 17:** The City will evaluate the program at least once a year.

**BMP No.** C.7

**Brief Description of BMP:**

The City regularly performs dry weather screening as part of its maintenance activities.

**Measurable Goal(s), including frequencies:**

The City will work to utilize inspection forms while performing the dry weather screening inspections.

**Milestones:** **Year 17:** The City will evaluate its dry weather inspection form and procedures.

**BMP No.** C.8

**Brief Description of BMP:**

The City regularly samples, test and documents the results of influent and effluent flow to various lakes and streams throughout the community. The City will continue or expand the program as needed to meet the ILR40 permit requirements and conditions.

**Measurable Goal(s), including frequencies:**

The City analyzes the stormwater quality to determine acceptable levels of water quality of its lakes and streams.

**Milestones:** **Year 17:** The City will continue the testing program and expand by 5% or as funding allows. Crystal Lake Outlet (DTZR-01) is identified on the IEPAs 303d list as impaired for primary recreational contact (fecal coliform).

**BMP No.** C.10

**Brief Description of BMP:**

The City has developed a monitoring and assessment program to evaluate the effectiveness of the BMPs on the receiving streams through the use of water quality sampling and testing provided by local watershed groups. To date, no TMDLs have been identified for the receiving streams in the City. The City will monitor the progress of watershed work groups and the establishment of any applicable TMDLs or other Watershed Management Plans. The City will continue the monitoring and assessment program.

**Measurable Goal(s), including frequencies:**

The goal of this activity is to monitor receiving streams for potential changes due to the discharge of stormwater and ensure compliance with applicable TMDLs and Watershed Management Plans to reduce waste loads.

**Milestones:** **Year 17:** The City will continue the monitoring and assessment program.

## 4. Construction Site Runoff Control

The City will perform activities and services related to the Construction Site Runoff Control minimum control measure. BMPs will be implemented under BMP numbers D.1, D.2, D.4, D.5 and D.6 as described below.

**BMP No.** D.1

**Brief Description of BMP:**

The City and County have ordinances in place to allow for review, inspection, and enforcement of construction site runoff controls.

**Measurable Goal(s), including frequencies:**

The City will continue to review, inspect and enforce the ordinance regulations to prevent or reduce the discharge of sediment or other pollutants from construction sites.

**Milestones:** **Year 17:** The City will enforce the regulatory procedures.

**BMP No.** D.2

**Brief Description of BMP:**

The City and County have ordinances in place to allow for review, inspection, and enforcement of construction site runoff control BMP's.

**Measurable Goal(s), including frequencies:**

The City will continue to review, inspect and enforce the ordinance regulations to prevent or reduce the discharge of sediment or other pollutants from construction sites as it relates to BMP's.

**Milestones:** **Year 17:** The City will enforce the regulatory procedures.

**BMP No.** D.4

**Brief Description of BMP:**

The City has procedures that proposed development plans to be reviewed for compliance.

**Measurable Goal(s), including frequencies:**

The City will continue to require all developments to be reviewed for compliance with NPDES regulations and other City ordinance standards.

**Milestones:** **Year 17:** The City will enforce the review procedures.

**BMP No.** D.5

**Brief Description of BMP:**

The City has produces in place for receiving, logging and addressing publicly reported issues.

**Measurable Goal(s), including frequencies:**

The City will continue to respond to publicly reported issues in a timely manner and investigate as needed to address them.

**Milestones:** **Year 17:** The City will respond accordingly.

**BMP No.** D.6

**Brief Description of BMP:**

The City and County regulatory programs allow for inspection and enforcement procedures for construction site runoff control.

**Measurable Goal(s), including frequencies:**

The City will continue to inspect all new developments for compliance with the City and County ordinances.

**Milestones:** **Year 17:** The City will enforce the ordinance.

**5. Post-Construction Runoff Control**

The City will perform activities and services related to the Post-Construction Site Runoff Control minimum control measure. BMPs will be implemented under BMP number E.2, E.3, E.4, and E.5 as described below.

**BMP No.** E.2

**Brief Description of BMP:**

The City and County have ordinances in place that allow for the review, inspection and enforcement of post-construction runoff control measures.

**Measurable Goal(s), including frequencies:**

The City will continue to enforce the ordinances for compliance with post construction runoff controls to prevent or reduce the discharge of contaminants from construction sites.

**Milestones:** **Year 17:** The City will enforce the ordinances.

**BMP No.** E.3

**Brief Description of BMP:**

The City has procedures in place for assisting and evaluating the long term maintenance of stormwater best management practices.

**Measurable Goal(s), including frequencies:**

The City will continue to assist developers, residents and other target audiences by providing sample maintenance plans and conducting inspections.

**Milestones:** **Year 17:** The City will increase distribution of the sample maintenance by 10% and conduct approximately 20% of the inspections.

**BMP No.** E.4

**Brief Description of BMP:**

The City has procedures in place for the pre-construction review of BMP designs. These procedures include pre-application meetings for large scale developments.

**Measurable Goal(s), including frequencies:**

The City will continue the review procedures and modify or evaluate as needed to maintain compliance.

**Milestones:** **Year 17:** The City will continue the BMP review procedures.

**BMP No.** E.5

**Brief Description of BMP:**

The City has procedures in place to perform site inspections during construction by qualified personnel.

**Measurable Goal(s), including frequencies:**

The City will continue with the site inspections procedures to verify compliance of BMP's in reducing and/or preventing the discharge of contaminants to local waterways and storm sewers.

**Milestones:** **Year 17:** The City will continue with the site inspection procedures.

**6. Pollution Prevention/Good Housekeeping**

This minimum control measure involves the development and implementation of an operation and maintenance program to reduce the discharge of pollutants from municipal operations. This program must include a training program for municipal employees. The City will perform BMPs under BMP numbers F.1, F.2, F.3, F.4, F.5 and F.6 as described below.

**BMP No.** F.1

**Brief Description of BMP:**

The City regularly provides training to staff regarding a variety of topics aimed at reducing or preventing the discharge of contaminants from municipal operations.

**Measurable Goal(s), including frequencies:**

The City will continue with the training program aimed at educating City staff on ways to reduce or prevent stormwater pollution from City activities.

**Milestones:** **Year 17:** The City will continue with the training program..

**BMP No.** F.2

**Brief Description of BMP:**

The City has an inspection and maintenance program in place to evaluate and maintain stormwater facilities. These activities include the City's extensive street sweeping program.

**Measurable Goal(s), including frequencies:**

The City will continue the inspection and maintenance program of stormwater facilities to reduce the amount of debris and pollutants that enter the stormwater system.

**Milestones:** **Year 17:** The City will continue the inspection program and evaluate approximately 20% of the stormwater system.

**BMP No.** F.3

**Brief Description of BMP:**

The City has procedures in place to reduce or prevent the discharge of contaminants to the stormwater system from municipal operations

**Measurable Goal(s), including frequencies:**

The City will continue to be proactive in evaluating municipal activities that could potentially introduce pollutants to the stormwater system and develop methods to reduce or prevent them.

**Milestones:** **Year 17:** The City will continue with the municipal control measures and evaluate additional methods as needed.

**BMP No.** F.4

**Brief Description of BMP:**

The City has procedures that require appropriate disposal of all wastes generated during municipal operations.

**Measurable Goal(s), including frequencies:**

The City will continue with the disposal program and requirements to reduce or eliminate the release of pollutants from municipal operations.

**Milestones:** **Year 17:** The City will continue with the municipal operations disposal program.

**BMP No.** F.5

**Brief Description of BMP:**

The City, County and State have strict development regulations related to floodplain management and the evaluation of potential development in these areas.

**Measurable Goal(s), including frequencies:**

The City will continue to enforce the requirements for potential development is special flood hazard areas.

**Milestones:** **Year 17:** The City will continue to enforce the flood management requirements.

**BMP No.** F.6

**Brief Description of BMP:**

The City regularly evaluates their municipal activities for additional ways to reduce or eliminate pollutants from entering the stormwater system including salt reduction, additional de-icing alternatives and other actions.

**Measurable Goal(s), including frequencies:**

The City will continue to evaluate and develop methods or changes to existing practices that can reduce or eliminate pollutants from entering the stormwater system from municipal activities.

**Milestones:** **Year 17:** The City will continue the evaluation and monitoring program.

**Specific Pollution Prevention /Good Housekeeping activities during permit Year 16 were as follows:**

**1) The City has a Storm Water Management Ordinance (No. 6535). The Storm Water Ordinance documents an illicit discharge and connection section.**

**2) All public works divisions have prepared and implemented Spill Prevention Control and Countermeasure Plans (SPCC). As a requirement of the SPCC Plan, inspections are conducted and documented at each of the facility divisions.**

**3) All employees in Public Works are trained in spill and clean-up procedures. This includes storm water control and flood management practices.**

**4) Chemicals and waste products in each division are stored following the SPCC guidelines.**

**5) Crystal Lake businesses with the potential for accidental or illicit discharges are required at a minimum to fill out a Wastewater Discharge Questionnaire, and in some cases a Slug Control Plan or Accidental Spill Plan. The Plans document the potential for spills and the prevention of pollutants into both sanitary and storm water sources.**

**6) All employees are trained in observing the potential for illicit discharges from industrial, commercial, and residential sources.**

**7) An Annual Phosphorous Optimization Reduction Report is sent to the IEPA. The report details practices taken by the City's wastewater treatment plants and businesses in Crystal Lake to reduce the use and discharge of Phosphorus.**

# Part E. Notice of Qualifying Local Program

**The City of Crystal Lake established an efficient and effective stormwater management program that is well beyond the minimum requirements of the federally mandated NPDES Phase II program during the previous 10-year permit period. The City will continue to monitor the existing program and modify it as necessary to continue to maintain compliance with the NPDES requirements. The City also partners with McHenry County and Friends of the Fox for various activities related to their NPDES program. Information related to the activities is attached.**

**1. Public Education and Outreach:**

The City of Crystal Lake developed a comprehensive program during the previous 10 year NOI permit period that provides Public Education and Outreach resources to its residents through printed materials and the City website. The City will continue this program and the associated activities.

This program relates to BMP numbers A.1, A.3, A.4 and A.6.

**2.Public Participation/Involvement:**

The City and McHenry County developed a comprehensive program to address the Public Participation/Involvement requirement developed during the initial 10 years of the NPDES Phase II permit. The details are outlined in the previous sections of this annual report.

These programs relate to BMP numbers B.2, B.3, B.6 and B.7.

**3. Illicit Discharge Detection and Elimination:**

The City developed a comprehensive program during the previous 10 year NOI permit period that addresses the Illicit Discharge Detection and Elimination requirements of the NPDES Phase II program. The applicable program details are outlined in the previous sections of this report.

These programs relate to BMP numbers C.1, C.2, C.3, C.4, C.5, C.6, C.7 and C.8.

**4. Construction Site Runoff Control:**

The City developed a comprehensive program during the previous 10 year NOI permit period that addresses the Construction Site Runoff Control requirements of the NPDES Phase II program. The applicable program details are outlined in the previous sections of this report.

These programs relate to BMP numbers D.1, D.2, D.4, D.5 and D.6.

**5. Post-Construction Runoff Control:**

The City developed a comprehensive program during the previous 10 year NOI permit period that addresses the Post-Construction Runoff Control requirements of the NPDES Phase II program. The applicable program details are outlined in the previous sections of this report.

These programs relate to BMP numbers E.2, E.3, E.4, and E.5.

**6. Pollution Prevention/Good Housekeeping:**

The City developed a comprehensive program during the previous 10 year NOI permit period that addresses the Pollution Prevention/Good Housekeeping requirements of the NPDES Phase II program. The goal of this BMP is to identify current practices that contribute to stormwater pollution and implement programs and procedures for municipal activities that curtail the discharge of pollutants to storm sewer systems. The applicable program details are outlined in the previous sections of this report.

These programs relate to BMP number F.1, F.2, F.3, F.4, F.5 and F.6.

## The City of Crystal Lake Continued there partnership with the Friends of the Fox River by funding $5,000 for their outreach activities. Results from previous years are provided below.

### River Watershed Monitoring Network - Crystal Lake Schools

**Spring 2017**

High water, poor weather conditions, and testing conflicts significantly reduced the normal spring season participation.

**Total - 352 Students**

**Fall 2017**

**Bernotas Middle School,** 9/11, 9/13, 9/15, 9/18, 9/19, 9/20, 9/26, 9/27, 9/28, 9/29, Crystal Creek (WWTP), 12 sessions, approx. 273 students, James Stone (jmstone@d47.org), Cindy Staroske (csstaroske@d47.org), Beth Schramm (bmschramm@d47.org).

**Prairie Ridge High School**, 9/26, 9/27, 9/28, 9/29, Sleepy Creek, 11 sessions, approx. 287 students (based off pdf schedule given), Stefanie Otto (sotto@d155.org), Janshego, Palese, MacDonald.

**Lundahl Middle School,** 10/2, 10/3, 10/4, 10/5, Crystal Creek, 5 sessions, approx. 237 students, Anne Rafferty (ahrafferty@d47.org), Tracy Wedell, Holly Wenc.

**Hannah Beardsley,** 10/11, 10/12, Crystal Creek (WWTP), 4 sessions (not including sessions at Sherwood), approx. 980 students, Beth Theiss (batheiss@d47.org), Carol Sevrey (casevrey@d47.org), Kurt Ruhnke (kdruhnke@d47.org).

**Total - 1,777 students**

**2017 Total – 2,129 students**

# Illinois Environmental Protection Agency

Bureau of Water • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## Division of Water Pollution Control
## ANNUAL FACILITY INSPECTION REPORT
## for NPDES Permit for Storm Water Discharges from Separate Storm Sewer Systems (MS4)

***This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report.***

Report Period: From March, 2018 To March, 2019

Permit No. ILR40 0264

**MS4 OPERATOR INFORMATION**: (As it appears on the current permit)

Name: McHenry County Mailing Address 1: 2200 N. Seminary

Mailing Address 2: County: McHenry

City: Woodstock State: IL Zip: 60098 Telephone: 815-334-4000

Contact Person: Peter Austin, County Administrator Email Address: pbaustin@mchenrycountyil.gov
(Person responsible for Annual Report)

**Name(s) of governmental entity(ies) in which MS4 is located: (As it appears on the current permit)**

McHenry County

**THE FOLLOWING ITEMS MUST BE ADDRESSED.**

A. Changes to best management practices (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

1. Public Education and Outreach ☐
2. Public Participation/Involvement ☐
3. Illicit Discharge Detection & Elimination ☐
4. Construction Site Runoff Control ☐
5. Post-Construction Runoff Control ☐
6. Pollution Prevention/Good Housekeeping ☐

B. Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.

C. Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

D. Attach a summary of the storm water activities you plan to undertake during the next reporting cycle ( including an implementation schedule.)

E. Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

F. Attach a list of construction projects that your entity has paid for during the reporting period.

***Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))***

Owner Signature: 5.24.19 Date:

Peter Austin Printed Name: County Administrator Title:

EMAIL COMPLETED FORM TO: epa.ms4annualinsp@illinois.gov

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

# Illinois Environmental Protection Agency
# Annual Facility Inspection Report
## for General Permit for Discharges from Small MS4s

## McHenry County – Permit No. ILR400264
## Permit Year 16: March 2018 to February 2019

## Contents

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# Part A. Changes to Best Management Practices, Year 16

Information regarding the status of all of the BMPs and measurable goals described in the MS4's SMPP is provided in the following table.

**Note: X indicates BMPs that were implemented in accordance with the MS4's SMPP**
**✓ indicates BMPs that were changed during Year 16**

| Year 16 MS4 | Best Management Practice (BMP) |
|---|---|
| **A. Public Education and Outreach on Storm Water Impacts** | |
| X | A.1 Distributed Paper Material |
| ✓ | A.2 Speaking Engagement |
| X | A.3 Public Service Announcement |
| ✓ | A.4 Community Event |
| ✓ | A.5 Classroom Education Material |
| X | A.6 Other Public Education |
| | |
| **B. Public Involvement/Participation** | |
| | B.1 Public Panel |
| X | B.2 Educational Volunteer |
| X | B.3 Stakeholder Meeting |
| | B.4 Public Hearing |
| X | B.5 Volunteer Monitoring |
| X | B.6 Program Involvement |
| X | B.7 Other Public Involvement |
| | |
| **C. Illicit Discharge Detection and Elimination** | |
| X | C.1 Sewer Map Preparation |
| X | C.2 Regulatory Control Program Review Ordinances |
| X | C.2 Regulatory Control Program Coordinate with MCEMA |
| X | C.3 Detection/Elimination Prioritization Plan |
| X | C.4 Illicit Discharge Tracing Procedures |
| X | C.5 Illicit Source Removal Procedures |
| | C.6 Program Evaluation and Assessment |
| X | C.7 Visual Dry Weather Screening |
| | C.8 Pollutant Field Testing |
| | C.9 Public Notification |
| | C.10 Other Illicit Discharge Controls |

| Year 16 MS4 | Best Management Practice (BMP) |
|---|---|
| **D. Construction Site Storm Water Runoff Control** | |
| X | D.1 Regulatory Control Program |
| X | D.2 Erosion and Sediment Control BMPs |
| | D.3 Other Waste Control Program |
| X | D.4 Site Plan Review Procedures |
| | D.5 Public Information Handling Procedures |
| X | D.6 Site Inspection/Enforcement Procedures |
| X | D.7 Other Construction Site Runoff Controls |
| | |
| **E. Post-Construction Storm Water Management in New Development and Redevelopment** | |
| | E.1 Community Control Strategy |
| X | E.2 Regulatory Control Program |
| X | E.3 Long Term O&M Procedures |
| X | E.4 Pre-Construction Review of BMP Designs |
| X | E.5 Site Inspections During Construction |
| X | E.6 Post-Construction Inspections |
| | E.7 Other Post-Construction Runoff Controls |
| | |
| **F. Pollution Prevention/Good Housekeeping for Municipal Operations** | |
| X | F.1 Employee Training Program |
| X | F.2 Inspection and Maintenance Program |
| X | F.3 Municipal Operations Storm Water Control |
| | F.4 Municipal Operations Waste Disposal |
| | F.5 Flood Management/Assess Guidelines |
| | F.6 Other Municipal Operations Controls |

No changes were made to the BMPs described in the MS4's SMPP during Year 16.

The current version of the Permit was issued on February 10, 2016 and the effective date was March 1, 2016. Therefore, the current MS4 complies with the March 1, 2016 Permit requirements for Year 15 and subsequent years, until the Permit expires in 2021. The MS4

remains committed to performing activities related to the six MCMs described in the most recent version of the Permit.

# Part B. Status of Compliance with Permit Conditions, Year 16

**Stormwater Management Activities, Year 16**

The stormwater management activities that the MS4 performed during Year 16, including the MS4's BMPs and measureable goals, are described in detail in the MS4's SMPP. A brief summary of the status of the MS4's stormwater management program, as of the end of Year 16, is provided below. The MS4's SMPP can be viewed at https://www.mchenrycountyil.gov/county-government/departments-j-z/planning-development/water-resources/npdes
The SMPP is also attached for reference.

## Status of Compliance with Permit Conditions

McHenry County revised its NOI in 2016 to better meet the requirements of the third permit cycle of the NPDES Phase II program to minimize nonpoint source pollution. All programs have been implemented.

## Assessment of Appropriateness of Identified BMPs

McHenry County incorporates the reviewed and identified structural and non-structural BMPs included in the McHenry County Stormwater Management Ordinance, McHenry County Access Management Ordinance, and McHenry County Subdivision Ordinance, which now includes Conservation Design Standards, Illinois Urban Manual, and IDOT Standards and Specifications into all development and transportation projects to the maximum extent practicable. All BMPs were reviewed and assessed for appropriateness and a revised NOI was submitted in 2016. BMPs not referenced below have a Qualifying Local Program (QLP) and a reference to the Stormwater Management Program Plan (SMPP) expounding in more detail the QLP being used to fulfill the BMP requirement.

## Progress Towards a Reduction in Pollutants Discharged

MCDOT has reduced and continues to reduce its salt usage during winter through new innovative pre-wetting and liquid mixtures in conjunction with equipment calibration. The MCDOT maintenance department continues to collect trash in the rights-of-way every spring in conjunction with the strong Adopt-A-Highway program in McHenry County. The Sheriff's Office supplements trash pickup throughout the County with inmate community service labor. Additionally, the MCDOT street sweeper program is reducing sediment load to receiving waters by cleaning all curbs and gutters at least twice in the year and the vactor truck activities are cleaning catch basins periodically throughout the year on a rotating cycle. These programs result in a large amount of tangible waste never reaching the surface waters of McHenry County. With the promotion and development of a new Water Resources Action Plan (WRAP) and annual Water Forum that is open to the public, education about surface and groundwater contamination is reaching more McHenry County residents of all ages, and will continue to do so in the future. ***The IEPA audited this program in January 2017, reporting the County in full compliance to General Permit ILR40 and our Notice of Intent.***

## Progress Towards Achievement of Measurable Goals Identified for Permit Year 16

The status of progress towards achieving identified measurable goals for each of the minimum control measures is presented below:

## 1. Public Education and Outreach on Storm Water Impacts

### BMP A.1 Distributed Paper Material

The goal of this program will be to make informational brochures available to the public to increase awareness of impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

*Year 16:* The NPDES Coordinators will monitor and refresh supplies of informational materials and brochures available for the public at the MCDOT facility, Planning & Development office, posted on the County's NPDES website and at public meetings for road construction projects. The Department of Health will oversee the availability of their brochures within their department. Monitoring of amount of brochures distributed will continue for BMP effectiveness.

*The County continued to exceed its measurable goal of providing informational material and brochures that increases awareness of the impacts of stormwater discharges on water bodies and steps that the public can take to reduce pollutants in stormwater runoff. Such information was made available to the public at all facilities, including the Department of Planning and Development, the Division of Transportation, and the Department of Health. Additionally, during all MCDOT project public meetings (100+ brochures distributed in each facility and at public meetings) and during each public event all departments strive to distribute relevant brochures. For compliance with the updated IPEA NPDES permit, most current educational materials are consistent with the revised permit requirements. The County also provided distributable materials on climate change, including the USEPA's "What Climate Change Means for Illinois" and "Climate Change & You - What You Can Do at Home" handouts. Planning and Development Staff also worked collaboratively with representatives from the Illinois State Water Survey and the Northwest Water Planning Alliance to create and distribute a two-page flyer explaining water quality issues associated with salt use and winter road maintenance. The flyer describes the negative impacts of salt on water and the Best Management Practices that can be employed to maintain safe roads while reducing salt use. Refer to the SMPP Appendix 5.3 for a comprehensive list of brochures available in Year 16.*

### BMP A.2 Speaking Engagement

The goal of this program will be to provide verbal communications that helps to increase awareness of impacts of stormwater discharges on water bodies for stakeholders in the community and the steps the public can take to reduce pollutants in stormwater runoff.

*Year 16:* The NPDES Coordinators will provide presentations, demonstrations or other public speaking engagements to raise awareness about water quality issues associated with stormwater discharges. The speaking engagements may be conducted by members of the Department of Planning and Development, the Health Department or the MCDOT. The number of speaking engagements about water resources will be monitored to evaluate BMP effectiveness.

*The County has met its measurable goal for speaking engagements by giving presentations at public events including an Earth Day celebration, presentations for numerous community organizations, a public library, an annual Green Living Festival, the County Fair, an annual Water Forum, and two Groundwater Festivals for students.*

**BMP A.3 Public Service Announcement**
The goal of this program is to increase awareness of impacts from stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

*Year 16:* The County will include one stormwater and/or water quality related article once a year in a conservation organization's newsletter which is distributed countywide, included on the McHenry County NPDES or Water Resources website, or in one of the two main local newspapers the Daily Herald or Northwest Herald distributed in McHenry County. Partnership with another MS4 permit holder will be considered to accomplish this BMP.

*The County exceeded its measurable goal for this BMP. Planning and Development staff was interviewed about water resources by reporters for articles about water resources that were published in the Northwest Herald newspaper. Planning and Development staff also wrote an article for a quarterly newsletter published by the Environmental Defenders of McHenry County, a regional environmental advocacy organization. The article discussed how salt from winter snow and ice management impacts water and how Sensible Salting practices can be used to maintain safety while reducing salt use. Please refer to the SMPP Appendix 5.5 for a comprehensive list of water quality related articles and the periodical in which they were published. The McHenry County Department of Planning and Development – Water Resources Division and MCDOT share an NPDES website that is hosted by the County. The Water Resources website reports on Groundwater Protection activities and maintains a large number of current articles and brochures on protecting groundwater, promoting water issue awareness, and conservation of water including green infrastructure BMPs. The Water Resources Division also maintains a website that focuses on Surface Water and Stormwater. Finally, the Department of Health has a website that includes water quality and pollution prevention information.*

**BMP A.4 Community Event**
The goal of this program is to increase awareness of impacts from stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

*Year 16:* The County will hold one public event focused on water resources including stormwater and/or water quality. The number of attendees will be monitored to evaluate effectiveness of the BMP.

*The County met the goal for this BMP. The Department of Planning and Development held a Water Forum that focused on green infrastructure and water quality issues. The free event was open to the public and over 100 people attended.*

**BMP A.5 Classroom Education Materials**
The goal of this program is to teach students about the impacts of stormwater discharges on water bodies and the steps that can be taken to reduce pollutants in stormwater runoff.

*Year 16:* The County will provide educational resources, including information about stormwater management, through the McHenry County Schools Environmental

Education Program (MCSEEP). The County will also participate in stormwater related events such as the Groundwater Festival.

*The County has met its measurable goal for this BMP. MCSEEP provided environmental education programs that included education about stormwater issues, in 65 schools, approximately 820 classes and reached approximately 25,000 students. Staff from MCSEEP, the Department of Planning and Development, and the Department of Health also participated in two Groundwater Festivals that included interactive programs on stormwater, water quality, best management practices, and green infrastructure. The groundwater festivals involved 5 schools and approximately 420 students, parents and teachers.*

**BMP A.6 Other Public Education - Website Links**
The goal of this program is to increase awareness of impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

*Year 16:* All information and website links will be monitored for accuracy and usage. As new information is published, the website will be updated accordingly.

*The County has met its measurable goal of including stormwater information, brochures, articles, volunteer programs, all NPDES reports, other agency newsletters, and agency links on the joint MCDOT and Water Resources Division NPDES website. A link to construction projects and individual NOIs is included for easy reference: https://www.mchenrycountyil.gov/county-government/departments-j-z/planning-development/water-resources/npdes. For compliance with the updated IPEA NPDES permit, the County also provided a link on the NPDES webpage to the the USEPA climate change webpage. All links are monitored for operation, content, and current information. Updates are made as new information becomes available by the Data/Communications Manager. See Section 3.A.6 of the SMPP for additional information. Monitoring of website visits is performed by a web counter. Approximately 212 unique visits to the NPDES website were counted during this reporting period.*

**2. Public Involvement/Participation**

**BMPs B.2 Educational Volunteer, B.5 Volunteer Monitoring, B.6 Program Involvement**
The goal of this program is to provide public involvement opportunities and participation programs that allow input from citizens during the development and implementation of the MS4's permit activities.

*Year 16:* The Adopt-A-Highway program will continue with the oversight of MCDOT. New volunteer groups will be added when the requests are approved by the County.

*The County has met its measurable goal of providing volunteer opportunities to stakeholders in the county. Through the County's Adopt-A-Highway program, 160 active volunteer groups covered 152.3 centerline miles over a total of 213.5 centerline adoptable miles, resulting in 71.3% of MCDOT adoptable miles being maintained. A total of 996 bags of refuse were collected by the 160 active volunteer groups. Refer to Section 3.B of the SMPP for further information.*

**BMP B.3 Stakeholder Meeting**
The goal of this program is to offer a venue for citizens to provide feedback on the MS4's permit and activities associated with it. Additionally, this BMP would also cover outside organization meetings that the MS4 attends.

*Year 16:* The County will continue to attend and participate in outside organization meetings and activities. The County will hold a presentation on the MS4 program at a regularly scheduled meeting to provide a public forum for comments.

*The County actively participates in outside organization meetings and activities, including watershed groups and environmental groups. The County will provide a public forum for comments on the County's MS4 program at the Planning, Environment and Development Committee meeting in June. County staff will give a presentation on the annual activities and solicit feedback from the committee and any public.*

**BMP B.7 Other Public Involvement**
The goal of this program is to document any other public involvement activities that citizens may assist the MS4 in detecting illicit discharges and drainage issues.

*Year 16:* Through the County's procedure for responding to citizen complaints regarding illicit discharges and drainage concerns and the County's Adopt-A-Highway program, all complaints are logged and addressed as appropriate. The County will annually determine if any of the MS4's jurisdiction may classify as an environmental justice area.

*Both the McHenry County Division of Transportation and McHenry County Department of Health answer all citizen complaints as they are received. The County has not identified any environmental justice areas within its jurisdiction, so no further documentation is required. Refer to Section 3.B.7 of the SMPP for further information.*

**3. Illicit Discharge Detection and Elimination**

**BMP C.1 Sewer Map Preparation**
The goal of this program is to maintain a storm sewer and structure map of all drainage and outfalls to receiving streams in the County's rights-of-way for ease in tracking the source of any illicit discharge.

*Year 16:* The MCDOT will maintain and update, as needed, the master list in SMPP Appendix 5.6, which includes all outfalls and names of receiving waters within the MCDOT rights-of-way and County facility detention/retention ponds. The MCDOT GIS specialist will continue to populate the drainage database with the entire MCDOT drainage system into the CarteGraph Drainage Module and ArcGIS.

*The MCDOT has exceeded its measureable goal. In 2008, the MCDOT Drainage Engineer surveyed the entire County Route system consisting of 225 center lane miles for types and condition of drainage structures, flow patterns, and other related information. The information*

*collected is currently available on aerial photographs with appropriate scale. GPS locations can be ascertained by a number of programs such as Google Earth and ArcGIS. An NPDES Outfall Inventory Map is referenced in the SMPP in Section 3.C.1 and Appendix 5.13. This map will continue to be reviewed and updated as needed and remain on file. Improvements to the map for Year 16 included the addition of color-coded watershed boundaries. Field inventory will continue as construction projects are completed. The MCDOT is currently keeping an up-to-date electronic database in CarteGraph and ArcGIS for all County drainage infrastructure.*

**BMPs C.2 Regulatory Control Program, C.3 Detection/Elimination Prioritization Plan, C.4 Illicit Discharge Tracing Procedures, and C.5 Illicit Source Removal Procedures**
See Qualifying Local Program – McHenry County Planning and Development Department, McHenry County Department of Health, McHenry County Emergency Management Agency, Illinois Environmental Protection Agency, and State Attorney's Office. Refer to Sections 3.C.2, 3.C.3, 3.C.4, and 3.C.5 of the SMPP for further information.

*Year 16:* The County conducts periodic inspections of the storm sewer outfalls listed in Appendix 5.6, which includes all outfalls and names of receiving waters within the MCDOT rights-of-way and County facility detention/retention ponds. The McHenry County Department of Health also responds to any complaints regarding illicit discharges and follows up with appropriate action to resolve any that are confirmed.

*No illicit discharges into County rights-of-way were recorded by the MCDOT for this permit period. The McHenry County Department of Health recorded 34 complaints with 19 actual illicit discharges noted within McHenry County.*

**BMP C.7 Visual Dry Weather Screening**
The goal of this program is to conduct periodic inspections of all storm sewer outfalls during dry weather conditions for detection of non-storm water discharges and illegal dumping.

*Year 16:* The MCDOT conducts periodic inspections of the storm sewer outfalls listed in Appendix 5.6, which includes all outfalls and names of receiving waters within the MCDOT rights-of-way and County facility detention/retention ponds. The MCDOT has prioritized high priority outfalls for annual inspections and the rest of the outfalls are inspected on a rolling basis over a five year period.

*The County performed this BMP during the Year 16 reporting period in accordance with the updated IEPA NPDES Permit. A list of the outfalls inspected during the Year 16 reporting period is included below. Refer to Section 3.C.7 of the SMPP for further information.*

The following list includes the outfalls identified in the Master List of Ponds, Detention/ Retention Facilities, Stream Channel Outfalls, and Storm Drainage Outfalls (Appendix 5.6 of SMPP) that were inspected during the Year 16 reporting year.

| Location No. | Location Description |
|---|---|
| **1** | **Algonquin Road over Gravel Pit Creek Str # 056-3166** |
| **2** | **Algonquin Road over Crystal Creek Str # 056-3165** |
| **7** | **Rakow Road over Crystal Creek Str # 056-3157** |
| 8 | Lakewood Road over Kishwaukee Creek |
| 9 | Main Street over South Branch Kishwaukee River Str # 056-3018 |
| 23 | Union Road over Kishwaukee River Str # 056-3026 |
| 25 | Millstream Road over Kishwaukee River Str # 056-3022 |
| 26 | Millstream Road over South Branch Kishwaukee River Str # 056-3023 |
| 27 | Deerpass Road over Kishwaukee River Main Channel Str # 056-3030 |
| 28 | Deerpass Road over Kishwaukee River Auxiliary Channel Str # 056-3029 |
| 30 | Kishwaukee Valley Road over Rush Creek Str # 056-3150 |
| 31 | Kishwaukee Valley Rd over tributary Rush Creek (east of Root Rd) Str # 056-3202 |
| 44 | Oak Grove Road over Alden Creek (west of Reese Road) |
| 45 | Oak Grove Road over Alden Creek (east of Wright Road) |
| 49 | Johnson Road over Nippersink Creek Str # 056-3128 |
| **53** | **Nelson Road over Slough Creek Str # 056-3201** |
| 54 | Charles Road over Slough Creek Str # 056-3006 |
| 55 | Charles Road over Tributary of the Nippersink Creek Str # 056-3211 |
| 56 | Greenwood Road over Nippersink Creek Str # 056-3155 |
| **62** | **Wilmot Road over Nippersink Creek Str # 056-3001** |
| **65** | **Chapel Hill Rd over Fox River Str # 056-3134** |
| 66 | Bay Road over connector Lac Louette and Pistakee Lake Str # 056-3106 |
| 67 | Bull Valley Road over tributary to Fox River |
| **68** | **Charles J. Miller Road over Fox River Str # 056-3149** |
| **69** | **Charles J. Miller Road over Fox River Str # 056-3190** |
| 70 | River Road drain for Lake Defiance |
| 71 | River Road culvert at Dowell intersection |
| 73 | Walkup Road over Sleepy Hallow Creek |
| 74 | Rakow Road cross culvert east of Pyott Road |

| | |
|---|---|
| **D** | **Rakow Road pond on NW corner McHenry Avenue** |
| **E** | **Rakow Road pond on NE corner Pyott Road** |
| **G** | **Charles J. Miller Road pond west of Green Street** |
| H | Charles J. Miller Road south side, east of Barreville Road retention/detention |
| **L** | **Walkup Road Pond east side, Outlot A of Patriot Estates** |
| R | County Records Storage facility fronting Nelson Road |
| S | Valley Hi Nursing Home Pond |
| **T** | **McHenry County Division of Transportation west pond** |
| **U** | **McHenry County Division of Transportation south pond** |
| W | Charles J. Miller Road north side west of River Road retention/detention |
| X | Charles J. Miller Road north side east of McHenry Public Works retention/detention |

*Inspection sites shown in* **BOLD** *above are High Priority areas that are monitored annually. The remaining areas are monitored, on a rotating basis, so that all outfalls/ponds/basins are monitored at least once in a five-year cycle.*

**4. Construction Site Storm Water Runoff Control**

**BMPs D.1 Regulatory Control Program, D.2 Erosion and Sediment Control BMPs, and D.4 Site Plan Review Procedures**

See Qualifying Local Program – McHenry County Planning and Development Department Stormwater Management Ordinance, Illinois Environmental Protection Agency, United States Army Corps of Engineers, Illinois Urban Manual, and McHenry-Lake County Soil & Water Conservation District. It should be noted that the current McHenry County Stormwater Management Ordinance provisions, Standard Soil Erosion and Sediment Control Notes, and other required guidance documents, along with staff review and approval of Stormwater Management Permits, meet the updated IEPA NPDES requirements. Refer to Sections 3.D.1, 3.D.2 and 3.D.4 of the SMPP for further information.

**BMPs D.6 Site Inspection/Enforcement Procedures and D.7 Other Construction Site Runoff Controls**

See Qualifying Local Program – McHenry County Stormwater Management Ordinance, Illinois Department of Transportation Construction Memoranda. Refer to Sections 3.D.6 and 3.D.7 of the SMPP for further information.

## 5. Post-Construction Storm Water Management in New Development and Redevelopment

**BMP E.2 Regulatory Control Program**
See Qualifying Local Program – McHenry County Stormwater Management Ordinance and Technical Reference Manual, McHenry County Unified Development Ordinance, Illinois Environmental Protection Agency, United States Army Corps of Engineers, Illinois Urban Manual, and McHenry-Lake County Soil & Water Conservation District. Refer to Section 3.E.2 of the SMPP for further information.

**BMP E.4 Pre-Construction Review of BMP Designs**
See Qualifying Local Program – McHenry County Department of Planning and Development and McHenry County Division of Transportation. Refer to Section 3.E.4 of the SMPP for further information.

**BMPs E.3 Long Term O&M Procedures, E.5 Site Inspections During Construction, and E.6 Post-Construction Inspections**
See Qualifying Local Program – E.3 McHenry County Access Management Ordinance; E.5 McHenry County Stormwater Management Ordinance and Illinois Department of Transportation Construction Memorandum; E.6 McHenry County Stormwater Management Ordinance and IDOT Standard Specifications for Road & Bridge Construction. Refer to Sections 3.E.3, 3.E.5, & 3.E.6 of the SMPP for further information.

## 6. Pollution Prevention/Good Housekeeping for Municipal Operations

**BMP F.1 Employee Training Program**
The goal of this BMP is to identify current practices that contribute to stormwater pollution and implement programs and procedures for County activities that curtail the discharge of pollutants to storm sewer systems.

*Year 16:* The County will continue in-house training and modify procedures as necessary to prevent the discharge of pollutants to the storm sewer systems from County facilities and rights-of-way.

*See Section 3.F.1 of the SMPP for a more comprehensive explanation of County departments and associated training conducted. Please refer to Appendix 5.9 of the SMPP for a detailed list of training attended by the nine major County departments.*

**BMP F.2 Inspection and Maintenance Program**
The goal of this BMP is to complete inspections of outfalls and detention/retention facilities once every Five years.

*Year 16:* The MCDOT Drainage Engineer will conduct inspections of NPDES outlets on a rotating basis during appropriate times of the year so that 100% of all outfalls are completed every five years.

*Please refer to Appendix 5.6 of the SMPP for a master list of ponds, detention/retention facilities, stream channel outfalls, and storm drainage outfalls which fall under the jurisdiction of the MCDOT and County Facilities as they are identified or added. Of the 100 NPDES locations identified in Appendix 5.6, a total of 40 (40%) were inspected during the Year 16 reporting period. Maintenance staff, throughout the County facilities, have been trained to report any illicit discharge contamination; no reports were made within the reporting period.*

**BMP F.3 Municipal Operations Storm Water Control**

See Qualifying Local Program - McHenry County Division of Transportation Policies and Procedures, Street Sweeping Program, Drainageways, Landscape Maintenance, Snow Removal and Ice Control, Salt and Liquid Storage and Handling Policy in conjunction with Groundwater Protection Program, vehicle and equipment operations, pet waste, and animal nuisance control. Refer to Section 3.F.3 of the SMPP for further information.

*Year 16:* The County will continue to incorporate pollution prevention and good housekeeping practices into day-to-day activities and operations.

*In Year 16, the MS4 continued using the vactor unit that was obtained in Year 13 to clean out outfalls and catch basins. The vactor unit has been operating 3 to 4 days per week clearing an average of 6 to 12 locations per each of those days. In addition, MCDOT's current MS4 involves street sweeping curb and gutter sections and bridge decks 3 to 4 times annually. It should be noted that the current County policies, procedures, and other countywide guidance documents meet the updated IEPA NPDES requirements. Using the current practices, our MS4 will improve the quality of storm water discharges from the County Highway system.*

# Part C. Information and Data Collection Results, Year 16

**IDDE Monitoring and Data Collection, Year 16**
Information and data that the MS4 collected as part of its illicit discharge detection and elimination (IDDE) program are summarized below.

*The McHenry County Department of Health (MCDH) completes bi-weekly sampling of all licensed public beaches in McHenry County for E.coli from Memorial Day through Labor Day. Any other water quality sampling/monitoring data collected was done by the McHenry County Health Department on an as-needed basis.*

*A total of 34 potential illicit discharges were investigated by the MCDH. The MCDH performed the inspections for all 34 potential illicit discharges in accordance with the procedures outlined in the county's SMPP. The inspections indicated 19 to be illicit discharges. No illicit discharges into the MCDOT rights-of-way were recorded for this permit period.*

# Part D. BMP Effectiveness Monitoring and Assessment Results, Year 16

**BMP Monitoring and Data Collection for Year 16**
Information and data that the MS4 collected as part of its BMP effectiveness monitoring and assessment program are summarized below.

*For Year 16, the County continued to implement the changes required under the ILR40 Permit that was reissued on March 1, 2016. The changes include providing a comprehensive list of BMPs/green infrastructure being implemented by the County to reduce pollutant loadings and water quality impacts. The effectiveness of the BMPs/green infrastructure was evaluated and results are provided in a tabular format in Appendix 5.16 of the SMPP.*

# Part E. Summary of Year 17 Proposed Stormwater Activities

The table below indicates the stormwater management activities that the MS4 plans to undertake during Year 17. Additional information about the stormwater management activities that the MS4 will perform during Year 17 is provided in the section following the table.

**Note: X indicates BMPs that will be implemented during Year 17**
**✓ indicates BMPs that are proposed be changed from Year 16**

| Year 17 MS4 | Best Management Practice (BMP) |
|---|---|
| **A. Public Education and Outreach on Storm Water Impacts** | |
| X | A.1 Distributed Paper Material |
| X | A.2 Speaking Engagement |
| X | A.3 Public Service Announcement |
| X | A.4 Community Event |
| X | A.5 Classroom Education Material |
| X | A.6 Other Public Education |
| | |
| **B. Public Involvement/Participation** | |
| | B.1 Public Panel |
| X | B.2 Educational Volunteer |
| X | B.3 Stakeholder Meeting |
| | B.4 Public Hearing |
| X | B.5 Volunteer Monitoring |
| X | B.6 Program Involvement |
| X | B.7 Other Public Involvement |
| | |
| **C. Illicit Discharge Detection and Elimination** | |
| X | C.1 Sewer Map Preparation |
| X | C.2 Regulatory Control Program Review Ordinances |
| X | C.2 Regulatory Control Program Coordinate with MCEMA |
| X | C.3 Detection/Elimination Prioritization Plan |
| X | C.4 Illicit Discharge Tracing Procedures |
| X | C.5 Illicit Source Removal Procedures |
| | C.6 Program Evaluation and Assessment |
| X | C.7 Visual Dry Weather Screening |
| | C.8 Pollutant Field Testing |
| | C.9 Public Notification |
| | C.10 Other Illicit Discharge Controls |

| Year 17 MS4 | Best Management Practice (BMP) |
|---|---|
| **D. Construction Site Storm Water Runoff Control** | |
| X | D.1 Regulatory Control Program |
| X | D.2 Erosion and Sediment Control BMPs |
| | D.3 Other Waste Control Program |
| X | D.4 Site Plan Review Procedures |
| | D.5 Public Information Handling Procedures |
| X | D.6 Site Inspection/Enforcement Procedures |
| X | D.7 Other Construction Site Runoff Controls |
| | |
| **E. Post-Construction Storm Water Management in New Development and Redevelopment** | |
| | E.1 Community Control Strategy |
| X | E.2 Regulatory Control Program |
| X | E.3 Long Term O&M Procedures |
| X | E.4 Pre-Construction Review of BMP Designs |
| X | E.5 Site Inspections During Construction |
| X | E.6 Post-Construction Inspections |
| | E.7 Other Post-Construction Runoff Controls |
| | |
| **F. Pollution Prevention/Good Housekeeping for Municipal Operations** | |
| X | F.1 Employee Training Program |
| X | F.2 Inspection and Maintenance Program |
| X | F.3 Municipal Operations Storm Water Control |
| | F.4 Municipal Operations Waste Disposal |
| | F.5 Flood Management/Assess Guidelines |
| | F.6 Other Municipal Operations Controls |

**Stormwater Management Activities, Year 17**
During Year 17, the MS4 plans to continue to perform a variety of stormwater management activities, as described in detail in the MS4's SMPP and in brief below. The MS4's SMPP can be viewed at https://www.co.mchenry.il.us/county-government/departments-j-z/planning-development/divisions/water-resources/npdes. It is also attached for reference.

## 1. Public Education and Outreach on Storm Water Impacts

### BMP A.1 Distributed Paper Material

The goal of this program will be to make available informational brochures to the public to increase awareness of impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

*Year 17:* The NPDES Coordinators will monitor and refresh supplies of informational materials and brochures available for the public at the MCDOT facility, Planning & Development office, posted on the County's NPDES website and at public meetings for road construction projects. The Department of Health will oversee the availability of their brochures within their department. Monitoring of amount of brochures distributed will continue for BMP effectiveness.

### BMP A.2 Speaking Engagement

The goal of this program will be to provide verbal communications that help to increase awareness of impacts of stormwater discharges on water bodies for stakeholders in the community and the steps the public can take to reduce pollutants in stormwater runoff.

*Year 17:* The NPDES Coordinators will provide presentations, demonstrations or other public speaking engagements to raise awareness about water quality issues associated with stormwater discharges. The speaking engagements may be conducted by members of the Department of Planning and Development, the Health Department or the MCDOT. The number of speaking engagements about water resources will be monitored to evaluate BMP effectiveness.

### BMP A.3 Public Service Announcement

The goal of this program is to increase awareness of impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

*Year 17:* The County will include one stormwater and/or water quality related article once a year in a conservation organization's newsletter which is distributed countywide, included on the McHenry County NPDES or Water Resources website, or in one of the two main local newspapers the Daily Herald or Northwest Herald distributed in McHenry County. Partnership with another MS4 permit holder will be considered to accomplish this BMP.

**BMP A.4 Community Event**
The goal of this program is to increase awareness of impacts from stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

*Year 17:* The County will hold at least one public event focused on water resources including stormwater and/or water quality. The number of attendees will be monitored to evaluate effectiveness of the BMP.

**BMP A.6 Other Public Education - Website Links**
The goal of this program is to increase awareness of impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.

*Year 17:* All information and website links will be monitored for accuracy and usage. As new information is published, the website will be updated accordingly.

**2. Public Involvement/Participation**

**BMPs B.2 Educational Volunteer, B.5 Volunteer Monitoring, B.6 Program Involvement**
The goal of this program is to provide public involvement opportunities and participation programs that allow input from citizens during the development and implementation of the MS4's permit activities. Refer to Section 3.B of the SMPP for further information.

*Year 17:* The Adopt-A-Highway program will continue with the oversight of MCDOT. New volunteer groups will be added when the requests are approved by the County.

**BMPs B.3 Stakeholder Meeting**
The goal of this program is to offer a venue for citizens to provide feedback on the MS4's permit and activities associated with it. Additionally, this BMP would also cover outside organization meetings that the MS4 attends. Refer to Section 3.B of the SMPP for further information.

*Year 17:* The County will provide a public forum on the County's MS4 program in conjunction with a regularly scheduled meeting. The County will also continue to attend outside organization meetings, as appropriate.

**BMP B.7 Other Public Involvement**
The goal of this program is to document any other public involvement activities that citizens may assist the MS4 in detecting illicit discharges and drainage issues. Refer to Section 3.B.7 of the SMPP for further information.

*Year 17:* The County will continue to provide active citizen participation in detection of illicit discharges to the storm sewer system and problems with drainage infrastructure. Both MCDOT and the Department of Health will continue to be the primary contacts for this minimum control measure. The County will verify if any areas of the MS4 jurisdiction qualify as an environmental justice area.

## 3. Illicit Discharge Detection and Elimination

### BMP C.1 Sewer Map Preparation

The goal of this program is to maintain a storm sewer and structure map of all drainage and outfalls to receiving streams in the County's rights-of-way for ease in tracking the source of any illicit discharge.

*Year 17:* The MCDOT will maintain and update, as needed, the master list in SMPP Appendix 5.6, which includes all outfalls and names of receiving waters within the MCDOT rights-of-way and County facility detention/retention ponds. The MCDOT GIS specialist will continue to populate the drainage database with the entire MCDOT drainage system into the CarteGraph Drainage Module and ArcGIS.

### BMPs C.2 Regulatory Control Program, C.3 Detection/Elimination Prioritization Plan, C.4 Illicit Discharge Tracing Procedures, and C.5 Illicit Source Removal Procedures

See Qualifying Local Program – McHenry County Planning and Development Department, McHenry County Department of Health. McHenry County Emergency Management Agency, Illinois Environmental Protection Agency, and State Attorney's Office. Refer to Sections 3.C.2, 3.C.3, 3.C.4, and 3.C.5 of the SMPP for further information.

### BMP C.7 Visual Dry Weather Screening

The goal of this program is to conduct periodic inspections of all storm sewer outfalls during dry weather conditions for detection of non-storm water discharges and illegal dumping.

*Year 17:* The MCDOT will conduct periodic inspections of the storm sewer outfalls listed in Appendix 5.6, which includes all outfalls and names of receiving waters within the MCDOT rights-of-way and County facility detention/retention ponds. During appropriate times of the year, the MCDOT will visit all high priority outfalls for annual inspections and the remaining outfalls will be inspected on a rolling basis over five-year intervals.

## 4. Construction Site Storm Water Runoff Control

### BMPs D.1 Regulatory Control Program, D.2 Erosion and Sediment Control BMPs, and D.4 Site Plan Review Procedures

See Qualifying Local Program – McHenry County Planning and Development Department Stormwater Management Ordinance, Illinois Environmental Protection Agency, United States Army Corps of Engineers, Illinois Urban Manual, and McHenry-Lake County Soil & Water Conservation District. Refer to Sections 3.D.1, 3.D.2 and 3.D.4 of the SMPP for further information.

*Year 17:* The McHenry County Department of Planning and Development, Water Resources Division will ensure that all regulated development within their jurisdictional boundaries acquires the necessary Stormwater Management Permits for construction. Through the permitting process, construction site storm water runoff controls will be reviewed and monitored for compliance with the NPDES permit requirements.

**BMPs D.6 Site Inspection/Enforcement Procedures and D.7 Other Construction Site Runoff Controls**
See Qualifying Local Program – McHenry County Stormwater Management Ordinance, Illinois Department of Transportation Construction Memoranda. Refer to Sections 3.D.6 and 3.D.7 of the SMPP for further information.

## 5. Post-Construction Storm Water Management in New Development and Redevelopment

**BMP E.2 Regulatory Control Program**
See Qualifying Local Program – McHenry County Stormwater Management Ordinance and Technical Reference Manual, McHenry County Unified Development Ordinance, Illinois Environmental Protection Agency, United States Army Corps of Engineers, Illinois Urban Manual, and McHenry-Lake County Soil & Water Conservation District. Refer to Section 3.E.2 of the SMPP for further information.

**BMP E.4 Pre-Construction Review of BMP Designs**
See Qualifying Local Program – McHenry County Department of Planning and Development and McHenry County Division of Transportation. Refer to Section 3.E.4 of the SMPP for further information.

**BMPs E.3 Long Term O&M Procedures, E.5 Site Inspection During Construction, and E.6 Post-Construction Inspections**
See Qualifying Local Program – E.3 McHenry County Access Management Ordinance; E.5 McHenry County Stormwater Management Ordinance and Illinois Department of Transportation Construction Memorandum; E.6 McHenry County Stormwater Management Ordinance and IDOT Standard Specifications for Road & Bridge Construction. Refer to Sections 3.E.3, 3.E.5, & 3.E.6 of the SMPP for further information.

## 6. Pollution Prevention/Good Housekeeping for Municipal Operations

**BMP F.1 Employee Training Program**
The goal of this BMP is to identify current practices that contribute to stormwater pollution and implement programs and procedures for MCDOT activities that curtail the discharge of pollutants to storm sewer systems.

*Year 17:* The County will continue in-house training and modify procedures as necessary to prevent the discharge of pollutants to the storm sewer systems from County facilities and rights-of-way.

**BMP F.2 Inspection and Maintenance Program**
The goal of this BMP is to complete inspections of outfalls and detention/retention facilities once every five years.

*Year 17:* During the summer months the MCDOT will conduct periodic inspections of the storm sewer outfalls listed in Appendix 5.6, which includes all outfalls and names of receiving

waters within the MCDOT rights-of-way and County facility detention/retention ponds. The MCDOT will visit all high priority outfalls for annual inspections and the remaining outfalls will be inspected on a rolling basis during appropriate times of the year over five-year intervals.

**BMP F.3 Municipal Operations Storm Water Control**

See Qualifying Local Program - McHenry County Division of Transportation Policies and Procedures, Street Sweeping Program, Drainageways, Landscape Maintenance, Snow Removal and Ice Control, Salt and Liquid Storage and Handling Policy in conjunction with Groundwater Protection Program, vehicle and equipment operations, pet waste, and animal nuisance control. Refer to Section 3.F.3 of the SMPP for further information.

*Year 17:* The County will continue to incorporate pollution prevention and good housekeeping practices into day-to-day activities and operations.

## Part F. Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

Not applicable during Year 16.

# Part G. Construction Projects Conducted During Year 16, Proposed for Year 17

Construction projects in Permit Year 16 funded by the McHenry County Division of Transportation (MCDOT) and covered by General Permit No. ILR400264 are listed below:

| Project Name | Project Size (acres) | Construction Start Date | Construction End Date |
|---|---|---|---|
| Guttschow Bridge | <1 acre | 6/2018 | 9/2018 |
| Randall Road | 66 acres | 6/2018 | 6/2021 |
| Bay Road Bridge | <1 acre | 4/2018 | 10/2018 |
| Chapel Hill Road Bridge | <1 acre | 5/2018 | 8/2018 |
| Deerpass Road Bridge | 3.4 acres | 5/2018 | 10/2019 |
| Thayer Road Bridge | <1 acre | 11/2018 | 12/2018 |
| Oak Grove Road Bridge | <1 acre | 5/2018 | 10/2018 |
| River Road/Dowell Road Roundabout | 3.5 acres | 6/2018 | 6/2019 |

There have been no incidents of non-compliance associated with any of these projects during this reporting year.

Pending future construction projects to be conducted during Permit Year 16 (March 2018 - February 2019) are listed below:

| Project Name | Project Size (acres) | Construction Start Date | Construction End Date |
|---|---|---|---|
| Randall Road | 66 | 6/2018 | 6/2021 |
| Union Road Bridge | <1 acre | 4/2019 | 9/2019 |
| O'Brien Road Bridge | <1 acre | 4/2019 | 7/2019 |
| Deerpass Road Bridge | 3.4 acres | 5/2018 | 10/2019 |
| River Road/Dowell Road Roundabout | 3.5 acres | 6/2018 | 6/2019 |

## Part F. Construction Projects Conducted During Year 16

***(Provide a list of construction projects your entity has paid for during the reporting period.)***

| Project Name | Project Size (acres) | Construction Start Date | Construction End Date |
|---|---|---|---|
| | | | |
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| | | | |