

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: Fro | m March, <u>2017</u> | To March, 2 | 2018 | | | Permit No | . ILR40 <u>0173</u> |
|--|--|---------------------------------|-----------------------|----------------------------|-----------------------------------|------------------------------------|---|
| MS4 OPERATOR | INFORMATION: (As it app | pears on the | current | permit) | | | |
| Name: City of Chi | cago | | Mail | ing Addre | ss 1: Jardine | Water Purific | cation Plant |
| Mailing Address 2:1 | 000 East Ohio Street | | | | | County: Co | ook |
| City: Chicago | | State: | IL | Zip: 6061 | 1 | Telephone: | 312-744-7001 |
| Contact Person: Bro | | | Email / | Address: | Brendan.Sc | hreiber@city | ofchicago.org |
| Name(s) of govern | mental entity(ies) in which | MS4 is loca | ated: (A | s it appe | ars on the c | urrent permi | t) |
| City of Chicago | | | | | | | |
| | | | | | | | |
| THE FOLLOWING | ITEMS MUST BE ADDRESS | SED. | | | | | |
| | management practices (chece(s) to BMP and measurable | | ite BMP | change(s |) and attach i | nformation | |
| | , | goals.) | | | | | |
| 1. Public Educ | ation and Outreach | 4. | Constr | uction Site | e Runoff Con | trol | |
| Public Partic | cipation/Involvement | <u> </u> | Post-C | onstructio | on Runoff Cor | ntrol | |
| Illicit Dischar | rge Detection & Elimination | ☐ 6. | Pollutio | n Preven | tion/Good Ho | ousekeeping | \checkmark |
| management prac | of compliance with permit co ctices and progress towards entified measurable goals for | achieving th | e statut | ory goal o | f reducing the | eness of your e discharge o | identified best of pollutants to the |
| | nformation collected and ana | | | | | ring the repo | rting period. |
| D. Attach a summar implementation s | y of the storm water activities chedule.) | s you plan to | undert | ake during | the next rep | orting cycle (| including an |
| E. Attach notice that | you are relying on another g | government | entity to | satisfy so | me of your p | ermit obligati | ons (if applicable) |
| F. Attach a list of co | nstruction projects that your | entity has pa | aid for d | uring the i | eporting peri | od. | |
| Any person who kno commits a Class 4 fe | wingly makes a false, fictitiou lony. A second or subsequen | s, or fraudul nt offense aft | ent mate ter convi | erial stater ction is a | nent, orally or Class 3 felony | r in writing, to y. (415 ILCS ! | the Illinois EPA 5/44(h)) |
| O jours | Owner Signature: | | | | 5/ | 14/18 | - |
| Alfonzo Conner | oor orginaturo. | | | Com | missioner | . | |
| | Printed Name: | | | | 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 WPC 691 Rev 6/10 has been approved by the Forms Management Center.

CITY OF CHICAGO ANNUAL FACILITY INSPECTION REPORT

GENERAL PERMIT FOR DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

Year 15 March 2017 – March 2018

Submitted to: Illinois Environmental Protection Agency

By: Chicago Department of Water Management

May 2018

A. Changes to Best Management Practices

The City of Chicago (City) continues its efforts to effectively manage stormwater runoff and protect the quality of area waters. This includes citywide implementation and modification of stormwater and pollution control BMPs to reduce the negative impacts of stormwater runoff; illicit discharge investigations and enforcement to ensure only stormwater is conveyed; and public education and participation efforts intended to increase the awareness of stormwater and water quality management issues.

One noteworthy change to the City's BMPs in Year 15 was the addition of green infrastructure training for City employees as part of Section F.1 – Employee Training Program.

B. Status of Compliance with Permit Conditions

See Table 1 on Page 3 for progress on each of the established City BMPs for the six minimum controls.

Additionally, after evaluating the approved Total Maximum Daily Loads (TMDLs) for Lake Michigan Beaches and Higgins Creek, the City commits to examining the applicability of the existing stormwater management program in relation to the approved TMDLs.

C. Information and Data Collection Results

In Year 15, the Department of Water Management (DWM) conducted visual observations of outfalls and their adjacent waterbodies for 42 MS4 locations, while documenting color, odor, clarity, solids, foam, oil sheen, and other indicators of stormwater pollution in the waterbody.

Further evaluation of stormwater quality and impacts were not completed in Year 15 due to budget constraints.

D. Summary of Year 15 Stormwater Activities

See Table 1, referenced in Section B, for a listing of the stormwater activities planned for Year 15 per each established City BMP.

E. Notice of Reliance upon Other Governmental Entities

The City of Chicago does not currently rely on other government entities for the City's MS4 program.

F. Construction Projects During Year 15

See Table 2 on Page 14 for a documentation of the construction projects located in MS4 areas for Year 15.

Table 1 Sections B and D BMP Progress and Goals

Public Education and Outreach

| BMP No. | BMP Category | Brief Description of BMP | Year 15 Measurable Goal Progress | Year 16 Measurable Goals |
|------------|---------------------------------|---|--|---|
| A.2 | Speaking Engagement | Develop, organize, and run technical seminars for engineers, architects, and the public on Stormwater Ordinance requirements. | Presented two hour seminar on Chicago's Stormwater Ordinance on 8/29/2017. | Develop and present at least 1 seminar. |
| A.3 | Public Service Announcement | Promote water conservation efforts through transit advertising and conservation kits. | Ran transit advertisements in bus shelters through the MeterSave program that provides information about water conservation efforts. | Continue running transit advertisements. |
| A.5 | Classroom Education Material | Provide stormwater management education materials to schools. As part of the Space to Grow program that was initiated in 2014, provide financial support for schools where green infrastructure has been or will be installed to help provide educational resources for the students. | Supported the existing 9 schools that had green infrastructure installed as part of Space to Grow. | Support the next 5 schools that will have green infrastructure installed as part of Space to Grow and continue to work with the existing schools. |
| A.6 | Other Public Education | Provide educational resources online about stormwater management. | Created MS4 specific page on DWM's website and uploaded the City's Notice of Intent, past Annual Report, and Stormwater Management Plan. Provided information and brochures about stormwater management in DWM's "Conservation" section. | Continually update website with any new or revised information including the Year 15 Annual Report. |

Public Involvement and Participation

| BMP No. | BMP Category | Brief Description of BMP | Year 15 Measurable Goal Progress | Year 16 Measurable Goals |
|------------|-----------------------------|--|---|---|
| В.3 | Stakeholder Meeting | Attend public events to inform the public about the stormwater management program. | Attended 22 public events including 15 aldermanic meetings and 7 residential fairs. | Attend 25 public meetings. |
| B.6 | Program Involvement | Provide stormwater management education materials, tools, and support as part of community workshops. As part of the Space to Grow program that was initiated in 2014, provide financial support for schools where green infrastructure has been or will be installed to help provide educational information and resource support for community workshops that promote rain barrels and rain gardens. | Supported the existing 9 schools that had green infrastructure installed as part of Space to Grow. | Support the next 5 schools that will have green infrastructure installed as part of Space to Grow and continue to work with the existing schools. |
| B.7 | Other Public Involvement | Work with residents to promote stormwater management BMP's on a community-wide level through neighborhood programs. | Received emails regarding basement flooding issues and coordinated with concerned residents. Directed residents to the 311 system or Private Drain program given their specific needs. No official Basement Flooding Partnerships were created given each of the situation's specifics. | DWM will focus on promoting stormwater management BMPs with communities through the Rain Ready program in conjunction with CNT and MWRDGC. |

Illicit Discharge Detection and Elimination

| BMP No. | BMP Category | Brief Description of BMP | Year 15 Measurable Goal Progress | Year 16 Measurable Goals |
|------------|-------------------------------------|--|--|--|
| | | | Maintained GIS outfall feature class, and added new outfalls per recently supplied information. Total | Maintain GIS outfall feature class, and add new outfalls when additional information becomes available. |
| C.1 | Sewer Map Preparation | Accurately represent the MS4 sewer system in GIS. | outfall count is now 165. Performed desktop analysis of the GIS mapping of outfalls and connecting sewers with the Atlas Pages. | Update GIS to reflect the estimated locations, connectivity, and attributes of the MS4 outfalls and their corresponding upstream pipes. Change symbology of storm and outfall pipes in the DWM tablets' GIS to assist field personnel. |
| C.2 | Regulatory Control Program | Investigate and enforce regulations that prohibit illegal dumping and illicit discharges. | Issued citations for illegal dumping or illicit discharges, and brought 28 cases to hearings. Began process of making regulations against illegal dumping and illicit discharges more stringent. | Issue citations for illegal dumping and illicit discharges. Finalize more stringent illegal dumping and illicit discharge regulations. |
| C.6 | Program Evaluation and Assessment | Institute an inspection frequency to evaluate the condition of all MS4 outfalls. | Developed inspection protocol. Inspected 42 of the 165 currently mapped outfalls. | Perform inspections for next 25% of outfalls. |
| C.7 | Visual Dry Weather Screening | Institute an inspection frequency to ensure there are no dry weather flows. | Inspected 42 of the 165 currently mapped outfalls. | Perform inspections for next 25% of outfalls. |
| C.10 | Other Illicit Discharge Controls | Develop an MS4 outfall inspection database and create a centralized location for MS4 information from all departments. | Created MS4 outfall inspection database using inspection data collected this year. | Add additional inspection information to database. Synchronize all other MS4 information into a centralized location. |

Construction Site Runoff Control

| BMP No. | BMP Category | Brief Description of BMP | Year 15 Measurable Goal Progress | Year 16 Measurable Goals |
|------------|--------------------------------------|--|--|--|
| D.1 | Regulatory Control Program | Ensure all regulated construction projects (over 15,000 square feet of land area or 7,500 square feet of paved area) are in compliance with the Stormwater Ordinance. Issue permits for projects that are in compliance with Municipal Code Chapter 11-18. | Reviewed 360 projects for Stormwater Ordinance Compliance. | Review plans and when applicable, issue permits for regulated construction projects. |
| D.1 | Regulatory Control Program | Ensure all projects at O'Hare obtain coverage under General Permit ILR10. | Obtained ILR10 coverage for 10 projects that began construction in Year 15, as seen in the Section F table. CDA's MS4 Compliance website is continuously updated posting each project's Notice of Intent, SWPPP, Notice of Coverage, and Notice of Termination. | Obtain ILR10 coverage for projects on O'Hare property. Continuously update MS4 Compliance website with relevant information. |
| D.2 | Erosion and Sediment Control BMPs | Ensure correct erosion and sediment control BMP's are being regulated through review of stormwater management documents. | Draft Regulations and Manual have been prepared, but a few items required final verification. Documents are planned to be finalized next year. | Finalize new update of the Stormwater Regulations and Manual. |
| D.2 | Erosion and Sediment Control BMPs | Ensure reviewed and finalized Sediment and Erosion plans are followed during construction for regulated developments. | Required permittees to sign soil erosion and sediment control affidavit. Affidavits kept on file. | Require permittees sign affidavit. |
| D.2 | Erosion and Sediment Control BMPs | Prevent spreading of sediment and debris from construction sites. | Issued 243 citations for construction site cleanliness. | Perform inspections and issue citations as needed. |
| D.3 | Other Waste Control Program | Encourage planned developments to exceed sustainable development guidelines. Require planned | 11 projects incorporated stormwater strategies into their developments as part of the Sustainable Development | Enforce planned developments applying for the specific programs |

| | | developments that are applying for additional benefits like TIF assistance or city land write-downs, to provide a holistic approach to sustainable development that exceeds minimum requirements. | Policy, including 6 projects which are providing 100% stormwater infiltration. | to exceed sustainable development guidelines to receive benefits. |
|-----|--|---|---|---|
| D.4 | Site Plan Review Procedures | Review site plans for Stormwater Ordinance compliance. Ensure site plans that require a stormwater management review get reviewed and approved before construction begins. | Reviewed applicable site plans for Stormwater Ordinance compliance. | Review regulated construction site plans. |
| D.6 | Site Inspection / Enforcement Procedures | For projects at O'Hare, complete inspections on a weekly basis and following precipitation events greater than .5" for regulated construction. | Completed inspections for regulated projects at O'Hare. | Perform inspections weekly and after rain events greater than 0.5 inches. |
| D.7 | Other Construction Site Runoff Controls | Prevent unnecessary debris from entering the system through catch basins during construction. When identified, require contractors to install debris covers on catch basins adjacent to construction sites. | Required contractors to cover catch basins adjacent to construction sites to prevent debris from entering the sewer system. | Require contractors to cover catch basins adjacent to construction sites. |

Post-Construction Stormwater Management

| BMP No. | BMP Category | Brief Description of BMP | Year 15 Measurable Goal Progress | Year 16 Measurable Goals |
|------------|-------------------------------|--|--|--|
| E.1 | Community Control Strategy | Collect and retain stormwater through the installation of green infrastructure on public property. Install green infrastructure as part of various projects including road reconstruction work, streetscape and traffic calming projects, schoolyard reconstruction, parking lot | Completed 2 streetscape projects. Designed and began construction of 10 remediation/stormwater management sites. | Install green infrastructure as part of public projects. |

| | | transformations, and sewer and water replacement projects. | | |
|-----|--|--|---|--|
| E.2 | Regulatory Control Program | Ensure correct post-construction runoff controls are being properly regulated through review of stormwater management documents. | Draft Regulations and Manual have been prepared, but a few items required final verification. Documents are planned to be finalized next year. | Finalize new update of the Stormwater Regulations and Manual. |
| E.3 | Long Term O&M Procedures | Enforce development and implementation of O&M plans for regulated projects. Verify developments have an approved O&M plan in place prior to construction. | Reviewed applicable O&M plans for Stormwater Ordinance compliance. | Review O&M plans. |
| E.4 | Pre-Construction Review of BMP Designs | Review site plans for BMP design compliance with Stormwater Ordinance. | Reviewed applicable site plans for Stormwater Ordinance compliance. | Review regulated construction site plans and their corresponding BMP designs. |
| E.6 | Post-Construction Inspections | Ensure that post-construction runoff controls on all regulated construction projects are in compliance. Perform post-construction final inspection by licensed professional engineer on regulated projects to confirm that the site is in compliance with the Stormwater Ordinance, plans, approvals, and permit conditions. | Inspected applicable constructed regulated developments for Stormwater Ordinance compliance. | Inspect constructed projects for compliance for post-construction runoff controls. |

Pollution Prevention and Good Housekeeping

| BMP No. | BMP Category | Brief Description of BMP | Year 15 Measurable Goal Progress | Year 16 Measurable Goals |
|------------|------------------------------|---|---|--|
| F.1 | Employee Training Program | Educate employees about stormwater management and pollution prevention BMPs. For the various departments in the City of Chicago, provide specific trainings and seminars that are applicable to the department and the employee's role. | For 2FM, Fleet and Facility Operations employees completed trainings on pollution prevention BMPs, and new hires completed trainings as part of the Sustainable Operations Plan onboarding process. For CDA, completed trainings on spill prevention and spill control procedures. During 2017, City employees and contractors received these trainings. For CDOT, held pollution prevention and stormwater management BMPs training for applicable employees. For DOB, stormwater review group presented a seminar on Chicago's Stormwater Requirements to DOB Project Managers. For DSS, trained staff responsible for outdoor salt storage on BMPs, and trained operators on salt application BMPs to prevent excess salt usage. Worked with machinery manufacturer to ensure right controls are being used. Also, completed street sweeper driver | Train employees about stormwater management and pollution prevention BMPs. |

| | | | training, which included BMPs on debris collection and disposal. For DWM, staff attended a seminar on "Stormwater Management for Municipal Separate Storm Sewer Systems (MS4s)", the Illinois Association for Floodplain and Stormwater Management (IAFSM) Annual Conference, the 2017 Storm Water Solutions (SWS) Conference, and FEMA training for disaster management for water and wastewater utilities. For 2FM, Floot and Facility | |
|-----|------------------------------|--|---|--|
| F.1 | Employee Training Program | Educate employees about green infrastructure. For the various departments in the City of Chicago, provide specific trainings and seminars that are applicable to the department and the employee's role. | For 2FM, Fleet and Facility Operations employees completed trainings on green infrastructure BMPs. A maintenance inspection form for facilities with green infrastructure was developed. Facilities and components have been identified. For CDOT, held training on bioswale and permeable pavement design, installation, maintenance, and repairs for applicable employees. For DOB, staff attended an online green infrastructure seminar. For DSS, developed Green Alley SOP. | Train employees about green infrastructure design, installation, maintenance, and repairs. |

| | | | For DWM, staff attended a webinar on "Incorporating Green Infrastructure", and planning, design, and construction project managers completed training on permeable pavement and bioswale design, installation, maintenance, and repairs. Cleaned 19,514 catch basins. Lined | Clean 25,000 catch basins, line 40 |
|-----|--|---|--|---|
| F.2 | Inspection and Maintenance Program | Maintain and rehabilitate the sewer system through cleaning, lining and replacement. | 40.7 miles of sewers and 5,141 structures. Replaced approximately 23 miles of sewers. | miles of sewers, line 5,000 structures, and replace 20 miles of sewers. |
| F.3 | Municipal Operations Stormwater Control | Prevent unnecessary debris from entering the system through catch basins. For catch basins that are part of CIP projects or are rehabbed/replaced, install new catch basin lids with small slots (ADA lids) to prevent debris from entering system. | Installed ADA lids for catch basins that were addressed as part of CIP projects or rehabilitation work. | Install ADA lids. |
| F.4 | Municipal Operations Waste Disposal | Institute a robust street sweeping protocol to prevent debris before entering the MS4 system. Deploy a street sweeper each day for every ward (50 wards) during sweeping season (April through November). | Swept 252,461 miles of streets and 5,001 alleys. | Sweep over 200,000 miles of streets and over 2,000 alleys. |
| F.4 | Municipal Operations Waste Disposal | Utilize a trash collecting skimmer boat along the Riverwalk during the warmer months. The Riverwalk has significant pedestrian traffic and allows direct access to the water, which increases the likelihood of pollution and thus the need for additional attention. | Deployed 2 skimmer boats 7 days a week, weather permitting, along the Riverwalk from March through November 2017. | Deploy skimmer boat during warm weather months. |
| F.4 | Municipal Operations Waste Disposal | On O'Hare property, remove and dispose of excess waste from | Collected waste and litter from airport grounds as needed. | Collect waste and litter from airport grounds. |

| | | pavement before entering the MS4 system. When needed, use a waste collection contractor to collect municipal operations waste and take off-site to a municipal landfill. Collect litter from airfield pavement. | | |
|-----|---|---|---|---|
| F.5 | Floodplain Management / Assess Guidelines | Ensure proper floodplain controls are performed. Perform floodplain reviews for regulated projects within and adjacent to the mapped floodplain. | Reviewed 8 regulated developments within floodplains to confirm compliance with the City's Flood Control Ordinance. | Review regulated projects within floodplains. |
| F.6 | Other Municipal Operations Controls | Follow specific department policies that involve pollution prevention. | For 2FM, followed specific pollution prevention BMPs for Fleet and Facility Operations. For CDA, ILR10 site specific SWPPs are continuously reviewed and approved based on project scope. Began update process on the overall O'Hare SWPPP. Followed spill prevention and spill control BMPs specific to O'Hare. For CDOT, continued enforcement of environmental terms and conditions. For projects permitted through Army Corps of Engineers and IEPA, followed applicable water quality and pollution prevention measures. For DSS, salt usage is controlled with an iPad system to help new drivers to use the right quantities for salt disbursement. Vehicles also | Follow department specific processes. |

| | have spreader controls that limit the | |
|--|---------------------------------------|--|
| | amount of salt spread per lane mile. | |
| | 95th Street Salt Pile is tarped when | |
| | not in use, and facility follows | |
| | specific BMPs. | |

Table 2
Section F
Year 15 Construction Projects

| Project Name | NPDES ILR10 Permit # | NOI | NOC | NOT |
|---|-------------------------|------------|-----------|-----|
| East Airfield Lighting Control Vault | ILR10Y169 | 3/1/2017 | 4/3/2017 | TBD |
| ARFF Station 2 Relocation | ILR10Y210 | 3/13/2017 | 4/14/2017 | TBD |
| Central Deicing Facility - Paving and Utilities | ILR10Y211 | 3/14/2017 | 4/14/2017 | TBD |
| Runway 10R-28L Safety and Security Additions Package 2 | ILR10Y704 | 5/23/2017 | 6/23/2017 | TBD |
| Central Deicing Facility - Ramp Tower | ILR10Y897 | 7/10/2017 | 8/10/2017 | TBD |
| Employee Parking Package 1 | ILR10Z179 | 8/17/2017 | 9/18/2017 | TBD |
| Taxiway Z/J and Tank Farm Road Package B | ILR10Z180 | 8/17/2017 | 9/18/2017 | TBD |
| Runway 9C-27C Package 2 | ILR10Z457 | 11/6/2017 | 12/7/2017 | TBD |
| FSIP - Truck Rack Facility | ILR10Z568 | 12/14/2017 | 1/12/2018 | TBD |
| Employee Parking Package 2 | ILR10Z583 | 12/22/2017 | 1/22/2018 | TBD |