

STORMWATER MANAGEMENT PROGRAM PLAN



Crystal Creek at Lawrence Avenue & N. River Road

Photo: GHA

VILLAGE OF SCHILLER PARK COOK COUNTY, ILLINOIS

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ILR40 Permit Requirements

The ILR40 NPDES Permit for MS4s requires that the Village of Schiller Park develop, implement, and enforce a stormwater management program plan (SMPP) designed to reduce the discharge of pollutants from the Village to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Illinois Pollution Control Board Rules and Regulations (35 III. Adm. Code, Subtitle C, Chapter 1) and the Clean Water Act. The Village's SMPP must include the six minimum control measures, described below.

6 Minimum Control Measures

The 6 minimum control measures to be included in the permittee's storm water management program are described below:

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

- a. The Village of Schiller Park provides copies of the handout "Make Your Home the Solution to Stormwater Pollution", adapted from the IEPA, at the Village Hall. This handout is included in Appendix B of this SMPP. The Village also maintains a link to the MS4 webpage on its website, located at <http://www.gha-engineers.com/ms4/>, which contains educational links and materials. The following topics are covered by these educational resources:
 - i. Information on effective pollution prevention measures to minimize the discharge of pollutants from private property and activities into the storm sewer system, on the following topics:
 - A. Storage and disposal of fuels, oils and similar materials used in the operation of or leaking from, vehicles and other equipment (SWANCC website);
 - B. Potential impacts/effects on storm water discharge due to climate change;
 - C. Homeowner tips for improving stormwater runoff; and
 - D. Winter de-icing material storage and use.
 - ii. Information about green infrastructure strategies such as green roofs, rain gardens, rain barrels, bioswales, and permeable pavement that mimic natural processes and direct storm water to areas where it can be infiltrated, evaporated or reused:
 - A. EPA webpage "What is Green Infrastructure?"
 - B. Link to "Homeowners Best Practices"
 - C. EPA's Menu of Best Management Practices
 - iii. Information on the benefits and costs of such strategies and provide guidance to the public on how to implement them:
 - A. EPA webpage "What You Can Do: In Your Home"- tips for homeowner best management practices
 - B. EPA webpage "What is Green Infrastructure?"
- b. In addition to the Stormwater handouts available at the Village Hall, the Village of Schiller Park has posted "Frequently Asked Questions" pages for the various Public Works Department programs, including garbage collection, recycling, snow plowing,

street sweeping, water service, and yard waste and branch pickup. The Village also includes an occasional posting in the Village newsletter regarding illicit discharge reporting.

- c. The Village annually evaluates its public education and outreach BMPs and measurable goals, and reports on this evaluation in the Annual Report to the IEPA.

2. Public Involvement/Participation

- a. The Village of Schiller Park complies with State and local public notice requirements when implementing a public involvement/ participation program.
- b. The Village of Schiller Park holds a minimum of one public meeting annually for the public, to provide input on the Village's SMPP and overall MS4 program. During the meeting, the Village Engineer/Consultant will give a presentation on the SMPP, including status of compliance, BMPs and measurable goals that the Village has defined, and results of the visual screening of the outfall. This requirement is met as part of a regularly scheduled board meeting.
- c. The Village of Schiller Park has reviewed environmental justice maps for areas within its jurisdiction. These maps are included in Appendix C. All areas of the Village are weighted equally in terms of environmental and demographic indicators, except for block groups 170318116003 and 170317708002, which tend to be in a slightly higher percentile. Information on environmental justice concerns may be found at <http://www.epa.gov/environmentaljustice/>.
- d. The Village annually evaluates its public involvement/participation BMPs and measurable goals, and reports on this evaluation in the Annual Report to the IEPA.

3. Illicit Discharge Detection and Elimination (IDDE)

- a. The Village of Schiller Park has developed a program to detect and eliminate illicit connections or discharges in the MS4, including illegal dumping. The Village has 7 outfalls which discharge to Crystal Creek, a tributary of the Des Plaines River. The IDDE program includes:
 - i. An annual dry weather inspection (visual) of the 7 outfalls;
 - ii. An annual inspection of approximately 7,200 linear feet of streambank;
 - iii. An annual inspection of 5 retention/detention basins;
 - iv. A contact/outreach [form](#) on the MS4 webpage (linked on the Village website) for the public to report a potential illicit discharge;
 - v. The Public Works Department phone number posted on the Village website for reporting potential illicit discharge emergencies/spills/dumping;
 - vi. Perform annual water quality testing of the parameters required by the ILR40 permit, at an upstream and downstream locations of Crystal Creek.

- b. The Village of Schiller Park has developed an outfall inventory map, showing the location of the outfall and the location of all waters that receive discharges from those outfalls. A complete storm sewer system map has not yet been developed, but is planned for future years. The storm sewer system map will be updated as necessary, to include any modifications to the sewer system. The outfall inventory map is included as Appendix D.
- c. Non-storm water discharges into the Village's storm sewer system are prohibited by the Village's "Prohibited Discharges" Ordinance (Chapter 52.31). As written in the ordinance, a penalty in the form of a fine will be imposed for either cause or permitting of non-stormwater discharges. This ordinance is included in Appendix E.
- d. In addition to its IDDE detection/elimination program and Ordinance, the Village educates public employees, businesses, and the general public about the hazards associated with illicit discharges via handouts at the Village Hall, and educational links on the MS4 webpage, as previously discussed.
- e. The Village annually evaluates its illicit discharge detection and elimination BMPs and measurable goals, and reports on this evaluation in the Annual Report to the IEPA.

4. Construction Site Storm Water Runoff Control

- a. The Village of Schiller Park implements the following procedures for Construction Site Stormwater Runoff Control:
 - i. The Village of Schiller Park complies with the ILR10 NPDES Permit for Storm Water Discharges from Construction Activities, which is applicable for any development or construction activity resulting in a land disturbance greater than or equal to 1 acre.
 - A. All regulated construction sites have a storm water pollution prevention plan (SWPPP) that meets the requirements of the ILR10 Permit, including management practices, controls, and other provisions at least as protective as the requirements contained in the Illinois Urban Manual, 2014, or as amended including green infrastructure techniques where practicable;
 - B. Sites requiring a SWPPP will have a signed certification on site, as well as a copy of the permit available;
 - C. Inspections are performed in compliance with the ILR10 permit.
 - ii. Village of Schiller Park's Community Development Department has posted the steps for the building permit application process, as well as project guidelines on several project types, to assist property owners in planning and constructing projects. In addition, the Village has adopted various codes related to building and erosion control:
 - A. The Village's Building Code (Chapter 150) includes International, National, and State codes regarding building, property maintenance, and safety, for residential, commercial, and industrial properties.
 - B. The Flood Protection Code (Chapter 151) includes requirements to submit soil erosion and sediment control (SESC) plans for disturbed areas in floodways and flood fringe areas. This plan must also include final stabilization and

restoration measures. The code also lists criteria for SESC measures in the floodway. A copy of this code is included in Appendix E.

- iii. All Cook County communities are governed by the Metropolitan Water Reclamation District of Greater Chicago's (MWRD) Watershed Management Ordinance (WMO), which sets requirements for Erosion and Sediment Control. This is intended to ensure that the construction site operator designs, installs, and maintains effective erosion controls and sediment controls to minimize the discharge of pollutants. Such controls area designed, installed, and maintained to:
 - A. Control storm water volume and velocity within the site to minimize soil erosion;
 - B. Control storm water discharges, including both peak flow rates and total storm water volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;
 - C. Minimize the amount of soil exposed during construction activity;
 - D. Minimize the disturbance of steep slopes;
 - E. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
 - F. Provide and maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal, and maximize storm water infiltration, unless infeasible; and
 - G. Minimize soil compaction and preserve topsoil, unless infeasible.
- iv. The Village of Schiller Park complies with MWRD's enforcement of the WMO, which requires all waste generated from construction site development (including building waste, concrete truck washout, chemicals, litter, sanitary waste, etc.) to be properly disposed of and prevented from entering the MS4 via stormwater runoff.
- v. Site plan reviews are conducted for all major developments, which incorporate consideration of potential water quality impacts and site plan review of individual pre-construction site plans by the permittee to ensure consistency with local sediment and erosion control requirements;
- vi. The Village of Schiller Park maintains a public comment form on the MS4 page on its website, where the public may report on potential stormwater discharges from construction sites.
- b. The Village complies with all requirements of the ILR10 permit and the WMO, and enforces penalties for non-compliance with its erosion control ordinance. The Village engineer is responsible for obtaining from the applicant, copies of all federal, state, and local permits that may be required. The enforcement officials (Chief Inspector and Village Engineer) will not approve a development plan until all other permits have been obtained.
- c. The Village annually evaluates its construction site storm water control BMPs and measurable goals, and reports on this evaluation in the Annual Report to the IEPA.

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

- a. For all new development and redevelopment, the Village of Schiller Park supports the MWRD's requirements in the WMO for reduction of the discharge of pollutants and the volume and velocity of storm water flow. The WMO has established standards for post construction stormwater management, including volume control BMPs. The WMO requires a Stormwater Management Submittal be included with the Watershed Management Permit, which includes following elements (when applicable): Site Runoff Plan, Stormwater Calculations, Base Flood Elevation Determination, Volume Control Plan, and Detention Facility Plan.
 - i. The Village of Schiller Park supports the MWRD's enforcement of Permanent Erosion Control Requirements, described in Article 4 of the WMO. Permanent erosion control practices are maintained until permanent stabilization is achieved.
 - ii. A Maintenance and Monitoring Plan Submittal, if required, plan must include all measures appropriate for the post-construction phase. These measures are described in Article 9 of the WMO.
- b. The Village's Flood Protection Code (Chapter 151), included in Appendix E, requires that requires that final stabilization and restoration measures must be included in the SESC plan for detention in floodplains, for disturbed areas in flood fringe areas, and in designated floodways. This plan shall include a description of the sequence of grading activities and the temporary sediment and erosion control measures to be implemented to mitigate their effects. This plan shall also include a description of final stabilization and revegetation measures, and the identification of a responsible party to ensure post-construction maintenance.
- c. The Village of Schiller Park ensures that all regulated construction sites have post-construction management plans that meet or exceed the requirements the ILR10 NPDES permit including management practices, controls, and other provisions at least as protective as the requirements contained in the most recent version of the Illinois Urban Manual, 2014.
- d. The Village annually evaluates its post-construction storm water management BMPs and measurable goals, and reports on this evaluation in the Annual Report to the IEPA.

6. Pollution Prevention/Good Housekeeping for Municipal Operations

- a. The Village of Schiller Park Public Works Department is responsible for Village operation and maintenance activities. These maintenance activities include: street sweeping, snow and ice control, storm and wastewater collection systems, tree branch collection, fleet maintenance, and street maintenance throughout the Village. Street sweeping is performed twice per month between April and November, with an additional spring cleanup sweep in late March.
- b. The Village of Schiller Park discharges to Crystal Creek, which is tributary to the Des Plaines River. The Des Plaines River is listed as impaired for chloride. The Village

implements various BMPs to reduce salt usage on roadways, to reduce the amount of chloride entering the waterway. The Village accomplishes this through:

1. Participation in the Lower Des Plaines River Watershed Council meetings, where chloride reduction strategies and updates are routinely discussed;
 2. The appropriate Village staff members have attended APWA seminars for Snow and Ice Management, and have reviewed additional de-icing Best Management Practice training materials.
 3. Tracking salt usage annually using the tracking form included in Appendix F.
- c. The Village annually evaluates its pollution prevention/good housekeeping for municipal operations BMPs and measurable goals, and reports on this evaluation in the Annual Report to the IEPA.

Monitoring

The Village of Schiller Park's plan for monitoring/evaluation is described in the Annual Report. Evaluation and/or monitoring results are provided in the Annual Report. The monitoring and assessment program includes direct water quality monitoring as follows:

1. The Village monitors the effectiveness of its storm water control measures/BMPs and progress towards the MS4's goals through the following process:
 - a. The major waterway to which Schiller Park discharges is Crystal Creek, a tributary to the Des Plaines River. The Village monitors at an upstream and downstream site along Crystal Creek on an annual basis, to compare pollutant concentrations over time and compare upstream and downstream concentrations. The pollutants the Village monitors are: chloride, fluoride, fecal coliform, oil/grease, total Kjeldahl nitrogen, total phosphorus, and total suspended solids.

Recordkeeping

The Village maintains copies of the last 4 Annual Reports and the SMPP on the MS4 webpage, a link to which is on the Village website. All records are kept at the Village Hall and are accessible to the Agency for review at the time of an on-site inspection. These records are also available to the public at reasonable times during regular business hours. The permittee may require a member of the public to provide advance notice, in accordance with the applicable Freedom of Information Act requirements.

Reporting

The Village of Schiller Park submits its Annual Report to the Agency by the first day of June for each year that this permit is in effect. A copy of the Annual Report is posted on the website by the first day of June of each year. Each Report shall cover the period from March of the previous year through March of the current year. Annual Reports are maintained on the Village website for a period of 5 years. The Report includes:

- An assessment of the appropriateness and effectiveness of the Village's identified BMPs and progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable, and the Village's identified measurable goals for each of the minimum control measures;
- The status of compliance with permit conditions, including a description of each incidence of non-compliance with the permit, and the Village's plan for achieving compliance with a timeline of actions taken or to be taken;
- Results of information collected and analyzed, including outfall and water quality monitoring data, during the reporting period;
- A summary of the storm water activities the Village plans to undertake during the next reporting cycle, including an implementation schedule;
- A change in any identified BMPs or measurable goals that apply to the program elements;
- Provide an updated summary of any BMP or adaptive management strategy constructed or implemented pursuant to any approved TMDL or alternate water quality management study. Use the results of your monitoring program to assess whether the performance requirements for storm water discharges from your MS4 are being met.