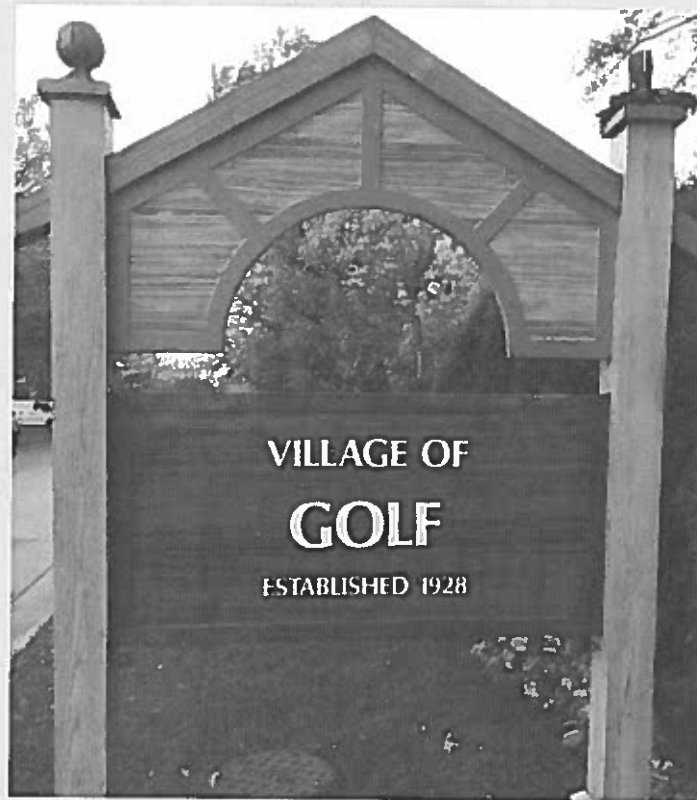


# STORMWATER MANAGEMENT PROGRAM PLAN



## VILLAGE OF GOLF

COOK COUNTY, IL

OCTOBER 27, 2016

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## ILR40 Permit Requirements

The ILR40 NPDES Permit for MS4s requires that the Village of Golf 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 Golf 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. The Village provides handouts on Best Management Practices (BMPs) most relevant to the Village of Golf. As a measurable goal, the Village of Golf provides educational materials at the Village Hall about the impacts of storm water discharges on water bodies,

and the steps that the public can take to reduce pollutants in storm water runoff. These handouts are available to all residents. The Village also maintains the MS4 webpage [link](#) on its website, as well as a [link](#) to the SWANCC website.

- 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 Golf complies with State and local public notice requirements when implementing a public involvement/ participation program.
- b. The Village of Golf 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 Golf has reviewed environmental justice maps for areas within its jurisdiction. These maps are included in Appendix D. All areas of the Village are weighted equally in terms of environmental and demographic indicators. 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 Golf has developed a program to detect and eliminate illicit connections or discharges in the MS4, including illegal dumping. The Village has one outfall, which is located at the Glen View Golf Club. This outfall flows directly into the West Fork of the North Branch Chicago River. The IDDE program includes:
  - i. An annual dry weather inspection (visual) of the Village outfall;
  - ii. Coordination with the Golf Club to report any noticeable discharge (odor, sheen, suds, color) flowing from the outfall;
  - iii. A contact/outreach [form](#) on the Village website for the public to report a potential illicit discharge;
  - iv. An emergency phone number on the Village website for reporting potential illicit discharge emergencies/spills/dumping.
- b. The Village of Golf has developed a storm sewer system map, showing the location of the outfall and the location of all waters that receive discharges from those outfalls. The storm sewer system map is updated as necessary, to include any modifications to the sewer system. This storm sewer system map is included in Appendix C.

- c. Non-storm water discharges into the Village’s storm sewer system are prohibited by the Village’s “Prohibition of Illicit Discharge” Ordinance. 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 Golf rarely has a development project that results in an acre or greater of land disturbance. However, when applicable, the Village implements the following procedures for Construction Site Stormwater Runoff Control:
  - i. The Village of Golf 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. The Village of Golf has adopted an ordinance for “Required Plans and Standards for Construction and Demolition” (8-3-5) into its Code, which is included in Appendix E. This includes “detailed plans and specifications for stormwater management, soil sedimentation and erosion control and grading on the subject property...Among other details, the required stormwater management plans shall include:
    - A. Drainage plans and soil erosion control during demolition, if any.
    - B. Stormwater management and soil sedimentation and erosion control during any period of time between completion of demolition and commencement of construction.
    - C. Stormwater management and soil sedimentation and erosion control commencing with preparation for foundation pouring and continuing during the entire construction process until final grading of the subject property.”
  - 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 insure 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 Golf complies with MWRD's enforcement of the WMO, which requires all waste generated as a result of 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 Golf 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 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 Golf 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 Golf 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 Code 8-3-7: "Commencement of Demolition or Construction", included in Appendix E, requires that construction sites must be full restored in conformance with the approved site restoration plan.
  - c. The Village of Golf 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 Golf contracts out all of its operation and maintenance activities. Currently the only maintenance activity that takes place in the Village is snow removal and de-icing. Since roadway de-icing is performed by a contractor, de-icing materials are stored off site in a permanent storage facility. No de-icing materials are stored within the Village. No vehicle or equipment maintenance or washing occurs within the Village.
- b. The Village of Golf has identified chloride as a pollutant of concern in the West Fork North Branch of the Chicago River. 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 North Branch of the Chicago River Watershed Planning Council (WPC) meetings, where chloride reduction strategies and updates are routinely discussed;
  2. Provide contractor with the "Winter Parking Lot and Sidewalk Maintenance Manual" who will provide a statement that they have read the manual and will incorporate BMPs into their de-icing practices.
  3. Contractor attends De-Icing Workshop when possible.
  4. 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 Golf'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. Since the Village of Golf has a population of less than 25,000, the Village conducts visual observations of the storm water discharge documenting color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, or other obvious indicators of storm water pollution. The location of this visual observation is at the Village of Golf's only outfall, located at the Glen View Golf Course.

## Recordkeeping

The Village maintains copies of the last 5 Annual Reports located on the MS4 webpage, on the Village website. The NOI and SMPP are also included 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 Golf 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 W LA or other performance requirements for storm water discharges from your MS4 are being met.



## Appendix A: Annual Schedule of MS4 Activities

### Year 14 (March 2016 – February 2017) MS4 Schedule

<b>Dates</b>	<b>Activity</b>
March – May 2016	Compile all Year 13 Monthly Tracking Information (Municipal Operations)
	Draft Year 13 Annual Report
	Village begins Year 14 Tracking (Municipal Operations)
June 1, 2016	Year 13 Annual Report due to IEPA, post on website
Summer 2016	Visual Dry Weather Outfall Screening
	Water Quality Inspection
Fall 2016	Presentation to Village Board & Public
	Contractor Attends De-Icing Workshop
Winter 2016/17	Continue Year 14 Monthly Tracking
March – May 2017	Compile all Year 14 Monthly Tracking Information (Municipal Operations)
	Draft Year 14 Annual Report
June 1, 2017	Year 14 Annual Report due to IEPA, post on website

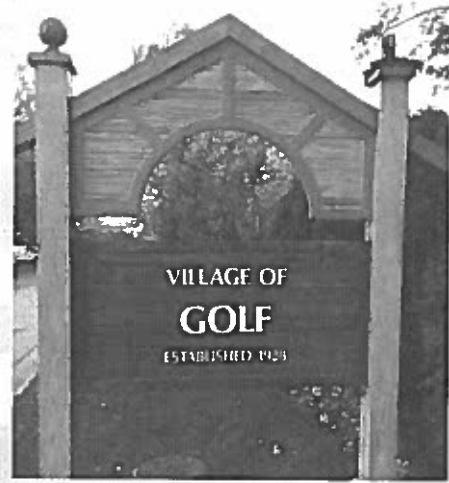
## Appendix B: Educational Materials

The educational handout located in this section is provided in hard copy form at the Village Hall, for residents to take and use. Please also see the MS4 webpage, located at [www.gha-engineers.com/ms4](http://www.gha-engineers.com/ms4) for additional online educational resources.

# Make Your Home the Solution to Stormwater Pollution!

As stormwater flows over driveways, lawns, and sidewalks, it picks up debris, chemicals, dirt, and other pollutants. Stormwater can flow into a storm sewer system or directly into a lake, stream, river, or wetland. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water. Polluted runoff is the nation's greatest threat to clean water.

By practicing healthy household habits, homeowners can keep common pollutants like pesticides, pet waste, grass clippings, and automotive fluids off the ground and out of stormwater. Adopt these healthy household habits and help protect lakes, streams, rivers, and wetlands. Remember to share the habits with your neighbors!



## *A homeowner's guide to healthy habits for clean water*

### Lawn and Garden

- Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Avoid application if the forecast calls for rain; otherwise, chemicals will be washed into your local stream.
- Select native plants and grasses that are drought and pest resistant. Native plants require less water, fertilizer, and pesticides.
- Sweep up yard debris, rather than hosing down areas. Compost or recycle yard waste when possible.
- Don't overwater your lawn. Water during the cool times of the day, and don't let water run off into the storm drain.
- Cover piles of dirt and mulch being used in landscaping projects to prevent these pollutants from blowing or washing off your yard and into local waterbodies. Vegetate bare spots in your yard to prevent soil erosion.

### Vehicle and Garage

- Use a commercial car wash or wash your car on a lawn or other unpaved surface to minimize the amount of dirty, soapy water flowing into the storm drain.
- Check your car, boat, motorcycle, and other machinery and equipment for leaks and spills. Make repairs as soon as possible. Clean up spilled fluids with an absorbent material like kitty litter or sand, and don't rinse the spills into a nearby storm drain. Remember to properly dispose of the absorbent material.
- Recycle used oil and other automotive fluids at participating service stations. Don't dump these chemicals down the storm drain or dispose of them in your trash.
- Properly store pool and spa chemicals to prevent leaks and spills, preferably in a covered area to avoid exposure to stormwater.
- Store salt for de-icing in a covered area, in an airtight container to maintain maximum effectiveness. Use sparingly - about a handful of rock salt per square yard.



### Pet Care

- When walking your pet, remember to pick up the waste and dispose of it properly. Flushing pet waste is the best disposal method.
- Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local waterbodies.



### Septic System Use and Maintenance

- Have your septic system inspected by a professional at least every 3 years, and have the septic tank pumped as necessary (usually every 3 to 5 years).
- Care for the septic system drainfield by not driving or parking vehicles on it. Plant only grass over and near the drainfield to avoid damage from roots.
- Flush responsibly. Flushing household chemicals like paint, pesticides, oil, and antifreeze can destroy the biological treatment taking place in the system.
- Other items, such as diapers, paper towels, and cat litter, can clog the septic system and potentially damage components.

### Swimming Pool and Spa

- Drain your swimming pool only when a test kit does not detect chlorine levels.
- Whenever possible, drain your pool or spa into the sanitary sewer system.
- Properly store pool and spa chemicals to prevent leaks and spills, preferably in a covered area to avoid exposure to stormwater.

### Home Repair and Improvement

- Before beginning an outdoor project, locate the nearest storm drains and protect them from debris and other materials.
- Sweep up and properly dispose of construction debris such as concrete and mortar.
- Use hazardous substances like paints, solvents, and cleaners in the smallest amounts possible and follow the directions on the label. Clean up spills immediately and dispose of waste safely. Store substances properly to avoid leaks and spills.
- Purchase and use nontoxic, biodegradable, recycled, and recyclable products whenever possible.
- Clean paint brushes in a sink, not outdoors, filter and reuse paint thinner when using oil based paints. Properly dispose of the excess paints through a household hazardous waste collection program, or donate unused paint to local organizations.
- Reduce the amount of paved area and increase the amount of vegetated areas in your yard. Use native plants in you landscaping to reduce the need for watering during dry periods. Consider directing downspouts away from paved surfaces onto lawns and other measures to increase infiltration and reduce polluted runoff.



For more information, visit

[www.gha-engineers.com/ms4](http://www.gha-engineers.com/ms4)

or

<https://www.villageofgolf.us/>

**To report pollution of the storm system, go to the website listed on this page or call the Golf Police (non-emergency) at (847) 998-8857**

***Remember: Only rain down the drain!***

**Village of Golf  
1 Briar Road  
Golf, IL 60029**