

Village of Frankfort

IEPA NPDES General Permit No. ILR40-0194

Storm Water Management Program (SWMP)

For discharges from Small Municipal Separate Storm Sewer Systems (MS4)

March 2016 to March 2021

August 19, 2016

A. General Information

1. Name: Terry Kestel

Title: Public Works Director

Mailing Address: Village of Frankfort – Public Works
432 W. Nebraska Street
Frankfort, IL 60423
Public Works Dept.: 815-469-2177

Mobile Phone: 815-405-7198

Email Address: TKestel@vofil.com

2. State Authority Contact:

Name: Mr. Alan Keller, PE

Title: Manager, Permit Section

Mailing Address: Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
P. O. Box 19276
Springfield, IL 62794-9276

Email Address: epa.ms4noipermit@illinois.gov



B. Governmental entities in which MS4 is located:

1. Cook County
2. Will County

C. Names of known receiving waters:

1. Hickory Creek
2. Hickory Creek Tributary 2
3. Hickory Creek Tributary A
4. Jackson Creek
5. Jackson Creek Tributary B
6. Hickory Creek Tributary 1
7. Hickory Creek Tributary 3
8. Union Drainage Ditch
9. Jackson Creek Tributary A

D. Storm Water Management Program Requirements:

1. The Village must develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from its small municipal separate storm sewer system (MS4) to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter 1) and the Clean Water Act. The storm water management program must include the 6 Minimum Control Measures (MCMs). The U.S. Environmental Protection Agency's National Menu of Storm Water Best Management Practices (<https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu>) and the most recent version of the Illinois Urban Manual should be consulted regarding the selection of appropriate BMPs.
2. You may partner with other MS4s to develop and implement your storm water management program.
3. For further details on the requirements for each of the 6 MCMs, please refer to the latest version of the General NPDES Permit No. ILR40.

E. Minimum Control Measures (MCMs):

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



F. Best Management Practices (BMPs):

A. Public Education and Outreach

- A.1 Distributed Paper Material
- A.2 Speaking Engagement
- A.3 Public Service Announcement
- A.4 Community Event
- A.5 Classroom Education Material
- A.6 Other Public Education

B. Public Participation/Involvement

- B.1 Public Panel
- B.2 Educational Volunteer
- B.3 Stakeholder Meeting
- B.4 Public Hearing
- B.5 Volunteer Monitoring
- B.6 Program Coordination
- B.7 Other Public Involvement

C. Illicit Discharge Detection and Elimination

- C.1 Storm Sewer Map Preparation
- C.2 Regulatory Control Program
- C.3 Detection/Elimination Prioritization Plan
- C.4 Illicit Discharge Tracing Procedures
- C.5 Illicit Source Removal Procedures
- C.6 Program Evaluation and Assessment
- C.7 Visual Dry Weather Screening
- C.8 Pollutant Field Testing
- C.9 Public Notification
- C.10 Other Illicit Discharge Controls

D. Construction Site Runoff Control

- D.1 Regulatory Control Program
- D.2 Erosion and Sediment Control BMPs
- D.3 Other Waste Control Program
- D.4 Site Plan Review Procedures
- D.5 Public Information Handling Procedures
- D.6 Site Inspection/Enforcement Procedures
- D.7 Other Construction Site Runoff Controls

E. Post-Construction Runoff Control

- E.1 Community Control Strategy
- E.2 Regulatory Control Program
- E.3 Long Term O&M Procedures
- E.4 Pre-Const Review of BMP Designs
- E.5 Site Inspections during Construction
- E.6 Post-Construction Inspections
- E.7 Other Post-Const Runoff Controls

F. Pollution Prevention/Good Housekeeping

- F.1 Employee Training Program
- F.2 Inspection and Maintenance Program
- F.3 Muni Operations Storm Water Control
- F.4 Municipal Operations Waste Disposal
- F.5 Flood Management/Assess Guidelines
- F.6 Other Municipal Operations Controls

Statement of Fairness – All BMPs shall and will be implemented, conducted, regulated, or enforced fairly throughout the entire Village as appropriate and applicable.



MCM 1: Public Education and Outreach

A1: Distributed Paper Material

1. Description of BMP:

Distribute printed materials throughout the year:

- a. Pamphlets available at the Building Department reception desk: “After the Storm” by USEPA.
- b. Newsletter articles on stormwater pollution awareness.

2. Target Audience: Village residents and business owners

3. Measurable Goals:

- Quantity of articles
- Frequency of distribution
- Public awareness
- Reduced pollutants

4. Schedule:

- a. Ongoing.
- b. Newsletter articles one to two times per year.

A4: Community Event

1. Description of BMP:

- a. Earth Day program (trash and debris cleanup throughout the Village).
- b. Student Government Day (tour of Frankfort Prairie Park).

2. Target Audience: Village residents and students

3. Measurable Goals:

- Debris collected (30-60 cubic yards of trash per year)
- Number of participants
- Improved awareness
- Reduced pollutants

4. Schedule:

- a. Earth Day activities are conducted in April each year.
- b. Student Government Day occurs in the spring each year.



A6: Other Public Education (Website)

1. Description of BMP:
The Village website will include the Village’s Notice of Intent (NOI) for the ILR40 permit renewal, Annual Reports (commencing with 2016) and the Stormwater Management Program (SWMP).
2. Target Audience: Village residents and business owners
3. Measurable Goals:
 - Website hits and usage
 - Public awareness
 - Reduced pollutants
4. Schedule: Ongoing/To be used throughout the year

MCM 2: Public Participation and Involvement

B4: Public Hearing (Meeting)

1. Description of BMP:
Village will hold an annual MS4 informational public meeting.
2. Target Audience: Village residents, business owners and Board Members
3. Measurable Goals:
 - Number of participants
 - Public questions
 - Public awareness
 - Meeting agendas and minutes
4. Schedule: Hold public meetings annually.



B7: Other Public Involvement

1. Description of BMP:
 - a. Earth Day program (trash and debris cleanup throughout the Village).
 - b. Student Government Day (tour of Frankfort Prairie Park).
 - c. Hotline is available for residents to call and discuss concerns related to stormwater.
 - d. Meetings with HOAs to discuss various topics, including stormwater.
 - e. Adopt-A-Road (Knights of Columbus)

2. Target Audience: Village residents and business owners

3. Measurable Goals:
 - Number of participants
 - Improved awareness
 - Reduced pollutants
 - Meeting notes/minutes
 - Records from phone calls/documentation of follow-up (if needed)
 - Items collected (cubic yards of trash)
 - Debris reduction

4. Schedule:
 - a. Earth Day activities are conducted in April each year
 - b. Student Government Day occurs in the spring each year
 - c. Used as needed
 - d. Meetings with HOAs occur in February each year
 - e. Ongoing



MCM 3: Illicit Discharge Detention and Elimination

C1: Storm Sewer Map Preparation

1. Description of BMP:

The Village will periodically evaluate and update its Storm Sewer map as needed to reflect new development and/or Village projects. The map is GIS-based and is reviewed annually for potential updates as needed or as new development and other Village projects occur. The map is used as a source for locating or obtaining information concerning outfalls, storm sewers, or storm structures. The outfalls will be numbered and storm sizes will be included in the next update.

2. Measurable Goals:

- Review and update annually (or as needed)
- Storm sewer and structures added

3. Schedule:

- a. Review the map annually, compile list of needs and files for updates.
- b. As budget allows, the map is updated as soon as is practicable.
- c. Map will be reprinted as needed.

C2: Regulatory Control Program (Ordinance)

1. Description of BMP:

The Village has an ordinance in place prohibiting dumping and related language for handing violations. The Village will also follow the guidance of the Center for Watershed Protection (CWP) Guidance Manual in the event more specific procedures are needed. Enforce current ordinances.

2. Measurable Goals:

- Ordinance effectiveness
- Current applicability

3. Schedule:

- a. The Regulatory Control Program will be enforced throughout the year.
- b. Review the regulatory program and ordinance adequacy in the third year of the permitting cycle for possible ordinance updates (2018-2019).



C3: Detection/Elimination Prioritization Plan

1. Description of BMP:
Following the Visual Dry Weather Screening, use the CWP Guidance Manual to prioritize detection and elimination of any discovered illicit discharges.
2. Measurable Goals:
 - Procedures effectiveness
 - Current applicability
 - Reduced pollutants
 - Removal of any illicit discharges
3. Schedule:
 - a. Used as needed.
 - b. Ongoing enforcement.

C4: Illicit Discharge Tracing Procedures

1. Description of BMP:
Following the Visual Dry Weather Screening, use the CWP Guidance Manual for tracing procedures of any discovered illicit discharges as needed.
2. Measurable Goals:
 - Procedures effectiveness
 - Current applicability
 - Reduced pollutants
 - Removal of any illicit discharges
3. Schedule:
 - a. Used as needed.
 - b. Ongoing enforcement.



C5: Illicit Source Removal Procedures

1. Description of BMP:

Following the Visual Dry Weather Screening and Tracing, use the CWP Guidance Manual for source removal procedures of any discovered illicit discharges as needed.

2. Measurable Goals:

- Procedures effectiveness
- Current applicability
- Reduced pollutants
- Removal of any illicit discharges

3. Schedule:

- a. Used as needed.
- b. Ongoing enforcement.

C7: Visual Dry Weather Screening (Outfall Inspections)

1. Description of BMP:

The dry weather screening program will consist of inspecting outfalls and logging the results on an appropriate inspection form. Inspections shall take place no sooner than 72 hours after a rain event. Photos of the outfalls may be taken. Priority outfalls will be inspected at least annually. Any discovered illicit discharges will flag the particular outfall for follow-up tracing and removal procedures.

2. Measurable Goals:

- Clean/cleaner outfalls
- Reduced illicit discharges/pollutants

3. Schedule:

- a. Perform inspections in dry weather times throughout the year, but primarily in the warm weather months no sooner than 72 hours after a rain event.
- b. Priority outfalls to be inspected at least annually.



MCM 4: Construction Site Runoff Control

D1: Regulatory Control Program (Erosion and Sediment Control Ordinance)

1. Description of BMP:

The Village has Ordinances and Design Standards in place for construction site runoff control. These ordinances are enforced on all construction projects by developers and/or the Village.

2. Measurable Goals:

- Ordinance enforcement through the plan review process.
- Reduced soil erosion and sediment.

3. Schedule:

- a. Ongoing enforcement.
- b. Periodic review of ordinance effectiveness and applicability.

D2: Erosion and Sediment Control BMPs

1. Description of BMP:

The Village will enforce installation and maintenance of erosion and sediment control BMP's for construction projects. Erosion and Sediment Control BMP's are required as part of the plan review process.

2. Measurable Goals:

- Ordinance enforcement through the plan review process.
- Reduced soil erosion and sediment.

3. Schedule:

- a. Ongoing enforcement.
- b. Periodic review of ordinance effectiveness and applicability.



D4: Site Plan Review Procedures

1. Description of BMP:

The Village has a procedure in place for development applications and plan reviews which will continue on an as needed basis. Reviews are done by Village Staff and/or engineering consultants, especially regarding stormwater and erosion and sediment control measures. Projects over one acre will continue to be required to submit a Notice of Intent (NOI) prior to construction. A signed SWPPP is required prior to allowing contractors to commence construction.

2. Measurable Goals:

- Ordinance enforcement through the plan review process.
- Reduced soil erosion and sediment.

3. Schedule:

- a. Ongoing enforcement.
- b. Periodic review of ordinance effectiveness and applicability.

D6: Site Inspection/Enforcement Procedures

1. Description of BMP:

Weekly inspection reports will continue to be required from developers of active projects. Periodic or surprise audit inspections are conducted by the Village as needed. The inspections are documented on appropriate forms. Developers will be informed of any noted deficiencies in their site's erosion and sediment control measures. Enforcement measures to achieve compliance include notification of deficiencies and stop work orders.

2. Measurable Goals:

- Inspection forms in developer's files.
- Ordinance enforcement.
- Reduced soil erosion and sediment.

3. Schedule:

- a. Ongoing enforcement.
- b. Developer is responsible for conducting inspections weekly and after 0.5" or greater rain events.
- c. Periodic inspections will be conducted by the Village as deemed necessary depending on level of activity at a site and on weather conditions.



MCM 5: Post-Construction Runoff Control

E2: Regulatory Control Program (Post Construction Runoff Control Ordinance)

1. Description of BMP:

The Village has various ordinances in place for post-construction site runoff control. These ordinances will be enforced on all construction projects by developers and/or the Village.

2. Measurable Goals:

- Ordinance enforcement.
- Reduced soil erosion and sediment.

3. Schedule:

- a. Ongoing enforcement.
- b. Periodic review of ordinance effectiveness and applicability.

E3: Long Term O&M Procedures

1. Description of BMP:

Post construction runoff control that includes O&M procedures is required where applicable and enforced during the plan review process. Erosion and sediment control ordinances are enforced.

2. Measurable Goals:

- Ordinance enforcement.
- Reduced soil erosion and sediment.

3. Schedule:

- a. Ongoing enforcement.
- b. Periodic review of ordinance effectiveness and applicability.



E4: Pre-Construction Review of BMP Designs

1. Description of BMP:
Pre-construction review of BMP designs handled during the development and site plan review processes.
2. Measurable Goals:
 - Ordinance enforcement.
 - Reduced soil erosion and sediment.
3. Schedule:
 - a. Ongoing enforcement.
 - b. Periodic review of ordinance effectiveness and applicability.

E5: Site Inspections During Construction

1. Description of BMP:
Weekly inspection reports will continue to be required from developers of active projects. Periodic or surprise audit inspections are conducted by the Village as needed. The inspections are documented on appropriate forms. Developers will be informed of any noted deficiencies in their site's erosion and sediment control measures. Enforcement measures to achieve compliance include notification of deficiencies and stop work orders.
2. Measurable Goals:
 - Inspection forms in developer's files.
 - Ordinance enforcement.
 - Reduced soil erosion and sediment.
3. Schedule:
 - a. Ongoing enforcement.
 - b. Developer is responsible for conducting inspections weekly and after 0.5" or greater rain events.
 - c. Periodic inspections will be conducted by the Village as deemed necessary depending on level of activity at a site and on weather conditions.



E6: Post-Construction Inspections

1. Description of BMP:

Enforce and perform final and periodic post-construction inspections. This may include inspections of existing detention basins, drainage structures, culverts, overland flood routes, or other major drainage features on an as needed basis.

2. Measurable Goals:

- Ordinance enforcement
- Reduced soil erosion and sediment

3. Schedule:

- a. Ongoing enforcement.
- b. Inspections of existing drainage facilities, structures, and conveyance paths or mechanisms on an as needed basis throughout the year.

MCM 6: Pollution Prevention and Good Housekeeping

F1: Employee Training Program

1. Description of BMP:

Train employees on how to better prevent pollution through their every day tasks and throughout the Village. Training may include public works aspects including stormwater management, salt spreading, spill protection, proper disposal of oil and debris, catch basin cleaning, and storm sewer inspection and jetting. Training will be completed either formally or informally at the local level and/or through an outsourced company.

2. Measurable Goals:

- Informed staff
- Agendas from Staff Meetings
- Reduced pollutants

3. Schedule:

- a. At least once a year



F2: Inspection and Maintenance Program

1. Description of BMP:

Maintenance will be performed throughout the Village on various infrastructure to reduce floatables and other pollutants within the downstream waterways. Conduct street sweeping; inspect, clean, and repair sewers, inlets/catch basins, culverts, ditches, and swales; perform detention basins inspections and maintenance; branch and leaf collection; conduct lawn maintenance as needed.

2. Measurable Goals:

- Keep Village systems in top operating condition.
- Reduced pollutants or contaminants.

3. Schedule: Ongoing and as needed:

- a. Street-sweeping – performed three times per year during the seasonal months (typically April through October)
- b. Inlets/Catch Basins – will be inspected and maintained as needed throughout the year – needed repairs may be performed in-house or by contractor. Catch basins will be cleaned once every 2-3 years.
- c. Storm sewers – will be inspected and cleaned or jetted on an as needed basis throughout the year – significant maintenance issues may not be able to be repaired immediately and may require special budgeting and scheduling depending on severity and impacts to drainage. All materials vacuumed from sewers and structures are picked up by Nu-Way.
- d. Detention ponds/basins – Village-owned detention basins will be inspected periodically (every 2-3 years) and maintained as needed – debris will be cleared from outlets as necessary to promote proper drainage. Other detention basins will be similarly inspected and maintained if proper easements allow for Village access.
- e. Culverts – if under Village control, will be inspected and debris removed as needed
- f. Ditch, swale or creek cleaning – will be inspected and cleaned as needed on an annual basis
- g. Branch collection – various times April through October and after storms
- h. Leaf collection – various times October through December.
- i. Lawn maintenance – cut and trim vegetation; remove landscape materials.
- j. Fertilizer and pesticide application – contracted out to Tru-green.
- k. Deicing materials – Village has two salt domes.



F3: Municipal Operations Storm Water Control

1. Description of BMP:

The BMPs for municipal operations for stormwater control will be reviewed for effectiveness and audited for compliance with the program. Revisions will be made as necessary. Typical municipal operations will continue to adhere to established and known stormwater control measures.

2. Measurable Goals:

- Program effectiveness
- Program compliance
- Reduced pollutants or contaminants

3. Schedule: Ongoing

F4: Municipal Operations Waste Disposal

1. Description of BMP:

The BMPs for municipal operations for waste control will be reviewed for effectiveness and audited for compliance with the program. Revisions will be made as necessary. Typical municipal operations will continue to adhere to established and known waste disposal measures. Waste disposal is typically logged and may be handled directly by Village staff or through a contracted disposal service. Fluids such as oil and coolant from vehicle maintenance are collected and disposed of according to typical methods as mentioned above. Village contracts with Future Environmental for pick up and disposal of used oil. Double or triple basins are routinely cleaned according to typical procedures. Spilled fuel is mopped up with an absorbent product or similar material and disposed of properly.

2. Measurable Goals:

- Program effectiveness
- Program compliance
- Reduced pollutants or contaminants

3. Schedule: Ongoing



F5: Flood Management/Assessment Guidelines

1. Description of BMP:

The Village has various ordinances in place for flood management. These ordinances are enforced on all construction projects by developers and/or the Village. The Village Ordinance includes components which enforce floodplain and flood hazard regulations for any development in or near to floodplains. Development plans are reviewed for compliance with applicable ordinances and policies with regard to flood management and for compliance with IDNR-OWR and FEMA regulations. Where applicable, developers will be required to submit for and obtain a Letter of Map Revision (LOMR) from FEMA.

2. Measurable Goals:

- Reduced flooding
- Flood reduction

3. Schedule: Ongoing/As Needed



G. Monitoring, Recordkeeping, and Reporting:

1. Monitoring:

Monitoring shall include at least annual monitoring of receiving waters upstream and downstream of the MS4 discharges, use of indicators to gauge the effects of stormwater discharges on the physical/habitat-related aspects of the receiving waters, and/or monitoring of the effectiveness of the BMPs.

2. Recordkeeping:

- a. The Village must keep records required by the ILR40 permit for up to 5 years after the expiration date of the permit. The current permit expires on February 28, 2021.
- b. All records shall be kept onsite or locally available and shall be made accessible to the Agency (IEPA) for review at the time of an on-site inspection.
- c. Except as otherwise required by the ILR40 permit, the Village must submit its records to the IEPA only when specifically asked to do so.
- d. As required by the ILR40 permit, the following (at a minimum) must be posted on the Village website:
 - i. Current Notice of intent (NOI)
 - ii. Storm Water Management Program/Plan (SWMP)
 - iii. Annual reports
- e. Storm sewer maps may be withheld for security reasons

3. Reporting:

- a. The Village must submit annual reports to the IEPA by the first day of June (**June 1**) for each year that the ILR40 permit is in effect.
- b. If the Village maintains a website, a copy of the annual report shall be posted on the website by June 1 of each year.
- c. Each report shall cover the period from March of the previous year through March of the current year. Please refer to the ILR40 permit for the list of items the annual report must include.

