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

**City of Danville, Illinois
NPDES PERMIT NO. ILR400546**

DATE: May 30, 2017

REPORTING PERIOD: March 1, 2016 to February 28, 2017

MS4 OPERATOR INFORMATION:

City of Danville
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INTRODUCTION:

The City of Danville is required to comply with Phase II of the NPDES Stormwater Program (ILR40 / MS4 permit), administered by the Illinois EPA. This report details the efforts the City of Danville has undertaken for the period Year 1 from March 1, 2016 through February 28, 2017 of the current permit, effective March 1, 2016.

The City received this General NPDES Permit for Discharges from Small MS4 issued by the IEPA on February 10, 2016 with an expiration date of February 28, 2021. The purpose of the permit is for municipalities to implement programs and practices to control stormwater pollution and thereby improve stormwater quality in their communities.

Danville has developed a plan tailored to the needs of the City, to address the six required Best Management Practices over the term of the NPDES Phase II Permit, and also addressing new

monitoring requirements implemented in the most recent permit. The Plan takes into account the environmental and physical needs of the City, while also accounting for time, personnel, and money needed to fulfill the measurable goals established for each BMP.

The City of Danville is currently working under an NOI written and submitted to the IEPA in September 2013. However, the new permit became effective in March 2016. To account for the new permit and its requirements, The City is working to modify its BMPs for the new applicable requirements. An updated NOI accompanies this report to clarify the City of Danville's proposed BMPs to meet the requirements of the permit. This report describes the status of the best management practice (BMP) activities as listed on the current NOI and summarizes the activities proposed during the next permit year.

Per ILR40 Part V.C, each permittee must submit an annual report which provides an assessment of the appropriateness and effectiveness of the BMPs, a status of compliance, results of information collected and analyzed, a summary of the storm water activities, any change in identified BMPs, a notice if the permittee is relying on another entity to satisfy some of the permit obligations, and updated summary of any BMP constructed or implemented pursuant to any approved TMDL.

The following constitutes Danville's 2016-2017 annual report.

A. STATUS OF COMPLIANCE

Below we provide an annual evaluation of each of the six Best Management Practices categories and the measurable goals for each. A status of compliance with permit conditions, an assessment of the appropriateness of the identified BMPs, the progress toward achieving compliance for the reporting year, and the identified measurable goals for each of the minimum control measures are discussed.

The general permit specifies that all permitted facilities establish annual goals for each of the six minimum control measures. The following is a brief summary of the BMPs chosen for each minimum control measure, the status of compliance for each goal associated with the BMPs chosen, an assessment of BMP appropriateness, and the progress towards meeting each goal.

Personnel Education and Outreach

Three BMPs were chosen under this minimum control measure.

Personnel Education and Outreach: A.1 – Distribute Paper Material.

BMP Description – Distribute stormwater runoff awareness brochure to local agencies and public buildings. Investigate other potential material distribution ideas that can promote BMP's.

Status – In the digital age, online distribution is often better received than paper handouts. Over the course of the summer and fall of 2016, we significantly updated Danville's Stormwater Management website www.danville-stormwater.org. The site now has information on general stormwater management, Danville's Stormwater Master Plan, Danville's NPDES MS4 Permit, some of the City's sustainability efforts, Site Design & Erosion Control for contractors, and a large section on "What Can YOU do?" with information on reducing pollution, recycling, tree planting, rain barrels, rain gardens, storm drain stenciling, climate change, household chemicals, pet waste management, disposal of oils and batteries, paint recycling, lawn and garden care, deicing materials, other common household hazardous waste disposal, etc. We have collected some general statistics from the website, and have seen our average daily unique visitor count raise from about 20 in the fall of 2016 to about 40 in March of 2017. This is likely due to the recent stormwater initiatives in the City Council in February and March of 2017.

Appropriateness – BMP is appropriate for this target audience, as it gives a variety of basic environmental information to a large group of citizens with information they can use at work and in their personal lives to help reduce pollution in Danville. Published information can be updated or changed quickly and at no additional costs to the City. Helps fulfill Part IV.B.1.a

Progress – Substantially Complete. The City of Danville intends to periodically update the website. We also plan to look into using other methods of print and electronic communication (ie, traditional handouts, Twitter or Facebook) to continue to share pollution prevention information with our citizens. We have not distributed paper brochures to local agencies or public buildings, as outlined in our previous NOI. Most of the information presented meets the requirement to include the benefits of the information presented. We have not been able to include information on the costs associated with each pollution prevention measure, as is required per Part IV.B.1.a.iii of the MS4 permit.

Measurable goals and future milestones – We will continue to track website hits monthly. We will plan to put at least one handout discussing stormwater and/or pollution prevention at the City of Danville Public Works building help desk before the end of the reporting year. We may simply create a handout referencing/advertising the website. We will pursue information on the costs of the pollution prevention measures on our webpage, and post them as appropriate.

Personnel Education and Outreach: A.2 – Speaking Engagement.

BMP Description – Promote and make available speaking engagements about storm water pollution and best management practices upon request of citizens or public organizations.

Status – As a City policy, our staff is available for speaking engagements upon request. However, we received no such requests during this reporting year. We do have information posted on the website about City personnel being available to help provide information to residents or to attend citizen’s groups meetings.

Additionally, there is a standing agenda item for the Public Works Committee Meetings on the second Tuesday of each month for NPDES concerns. The City Engineer speaks regularly to update the City Council on the status of the NPDES permit. The Stormwater Engineer gave a presentation on the needs of the NPDES program on January 10, 2017 to the Public Works Committee. The contractor responsible for the Stormwater Master Plan gave a presentation regarding the Master Plan (including touching on NPDES requirements) to the City Council on May 3, 2016, and to the Meadowlawn Area Neighborhood Association on May 16, 2016.

Appropriateness – BMP is appropriate for this target audience, as it is important for citizens to become engaged through their community or school groups. School aged children, and adults actively engaged in community groups are likely to promote the messages they learn with their peers, benefiting the community even more.

Any speaking engagements at Public Works Committee Meetings or City Council Meetings are recorded as part of the public record. Sound recordings are available on the City website. Citizens and Council Members learning about the Stormwater Master Plan helped to secure the approval of the report by the City Council. The presentation to the Public Works Committee in January helped convey the staff and monetary needs to meet all of the requirements of the ILR40 permit the City of Danville is charged with implementing on an annual basis.

Progress – Complete. The City of Danville regularly updates the Public Works Committee and any of the public in attendance on the status of the NPDES program. Additional meetings took place this year to help pass the Stormwater Master Plan.

Though City Staff is available for speaking engagements, we have not actively promoted to local schools or community groups our stormwater education awareness opportunities, as outlined in our previous NOI.

Measurable goals and future milestones – We will plan to continue our regular NPDES updates at the Public Works Committee meetings, and at the City Council as appropriate. We will also more actively promote speaking engagements in the community, reaching out to the schools and continuing to offer speaking engagements on our webpage. We will plan to participate in at least one speaking engagement each year discussing stormwater and/or pollution prevention within the City of Danville – either in a school setting or a community group meeting such as a Homeowners Association meeting, etc.

Personnel Education and Outreach: A.6 – Other Public Education.

BMP Description – Improve communications between residential and commercial activities adjacent to projects to keep both residences and business owners informed on construction project progress. Publicize project information via City web site and provide staff phone lines for residents to report problems.

Status – As of the end of the reporting year, the Engineering and Urban Services (EUS) website (www.cityofdanville-eus.org) included a small amount of information on City projects. Most of the posted materials related to plans and feasibility studies, with a few construction projects included. Within the stormwater website (www.danville-stormwater.org), a link is provided to the IEPA webpage to search for ILR10 permitted construction projects within the City.

Appropriateness – BMP is appropriate for this target audience, as it provides the public a general overview of the construction being planned and implemented throughout the City, and gives the Citizens a better idea of what their tax dollars are being used for.

Progress – Partially Complete. Some of the pertinent information was posted for the reporting year. A more thorough listing of the construction projects taking place in town is being implemented during the upcoming reporting year.

Measurable goals and future milestones – As of May 2017, and moving forward, we will now have a map online of current and proposed City Construction projects, as well as descriptions of each, on the EUS webpage. General roadway closures for Public Works resurfacing, etc, are posted via public notice practices to the news media outlets. Information will be updated regularly, with a minimum of quarterly updates taking place.

Public Participation & Involvement

Three BMPs were chosen under this minimum control measure.

Public Participation & Involvement: B.2 – Educational Volunteer.

BMP Description – Have staff personnel volunteer and available to speak to groups, businesses, and owners on storm water pollution and best management practices when opportunities arise.

Status – As a City policy, our staff is available for speaking engagements upon request. However, we received no such requests during this reporting year. We do have information posted on the stormwater website about City personnel being available to help provide information to residents or to attend citizen’s groups meetings.

Appropriateness – BMP is appropriate for this target audience, as it is important for citizens to become engaged through their community or school groups. School aged children, and adults actively engaged in community groups are likely to promote the messages they learn with their peers, benefiting the community even more.

Progress – Partially Complete. Though City Staff is available for speaking engagements, we have not actively promoted to local schools or community groups, or to businesses our stormwater education awareness opportunities, as outlined in our previous NOI. We also do not have educational and display presentation material prepared, though materials and/or PowerPoint presentation(s) would be created at the time of need.

Measurable goals and future milestones – We will plan to more actively promote speaking engagements in the community, reaching out to the schools and continuing to offer speaking engagements on our webpage. We will plan to participate in at least one speaking engagement each year discussing stormwater and/or pollution prevention within the City of Danville – either in a school setting or a community group meeting such as a Homeowners Association meeting, etc.

Public Participation & Involvement: B.5 –Volunteer Monitoring.

BMP Description – Review and update as needed the current web-based system for reporting problems on storm water pollution issues. Review the City’s response plan.

Status – The City has recently updated the web-based system for reporting problems on stormwater pollution issues. Prominently displayed on the stormwater webpage, www.danville-stormwater.org, is a form for citizens to “Report flooding, erosion, pollution, or illegal dumping”. We also accept phone calls from citizens with the same concerns. The completed forms are automatically emailed to the City Engineer, Assistant City Engineer, and the Stormwater Engineer. Similar forms are also available on all other City webpages: Engineering and Urban Services, Public Works, and City of Danville homepage.

Appropriateness – BMP is appropriate for this target audience, as it allows citizens to report concerns 24 hours a day. It also enables photo and video uploads.

Progress – Complete. The web form was updated in the summer of 2016. City personnel have only received 1 complaint via this form during the reporting year. A small number of phone calls have been received during this time. All concerns have been private drainage issues the City then discussed with homeowners to help them address.

Measurable goals and future milestones – We will continue to offer this reporting system to the citizens of Danville. We will continue to monitor any phone calls with concerns, as well.

Public Participation & Involvement: B.7 –Other Public Involvement.

BMP Description – Encourage storm drain stenciling and stream cleanup programs to the public by providing web based information about public volunteer opportunities about storm inlet stenciling and roadside/stream cleanup.

Status – The City of Danville encourages citizens to participate in storm drain stenciling and stream cleanup programs, by providing web-based information about these opportunities at <http://www.danville-stormwater.org/storm-drain-stenciling.html>.

Appropriateness – BMP is appropriate for this target audience, as it provides some basic guidance on these public involvement opportunities.

Progress – Substantially Complete. Danville updated its storm drain stenciling webpage in the summer of 2016. It now contains information and links to the Prairie Rivers Network in Champaign, which provides storm drain stenciling kits for free. We do not have any specific information on our site about stream cleanup programs, though we have general information encouraging citizens to organize their own community cleanup activities.

Measurable goals and future milestones – We will continue to offer this information to the citizens of Danville. On the site, we ask citizens to let us know about their events. We received no such notifications in the last reporting year. We will report any citizen lead storm drain stenciling ventures received each year.

Illicit Discharge Detection & Elimination

Six BMPs were chosen under this minimum control measure.

Illicit Discharge Detection & Elimination: C.1 – Storm Sewer Map Preparation.

BMP Description – Continue mapping program and televising of storm and sanitary sewers. Incorporate a data inventory for detection of illicit discharges.

Status – The City of Danville has a televising and mapping program for the storm and sanitary sewer systems. The program focuses on sanitary sewers, but does televise and map storm sewer piping in the event of emergencies like significant illicit discharges detected or significant stormwater piping failures.

Appropriateness – BMP is appropriate for this target audience, as it provides updated mapping information, though on a significantly limited basis.

Progress – Partially Complete. The City of Danville televised approximately 7 miles of stormwater pipes this reporting year. We mapped and added approximately 4 miles of new stormwater pipes to our GIS maps. We also updated approximately 3 miles of existing pipes within the GIS system.

We estimate that we have over 100 miles of storm sewer pipe in the City. We have approximately 20 miles of storm sewer pipe currently mapped, at an estimated 75% accuracy. We have about 10,000 stormwater structures currently mapped. We estimate there are probably 10,000 more structures which need to be mapped and added to the GIS. Significant increases to our mapping efforts will be needed to complete our storm sewer mapping and verification program before the end of the permit cycle in February 2021.

Measurable goals and future milestones – We will continue to televise and map storm sewers on an emergency basis. Until a funding mechanism is developed for the stormwater management program, storm sewer investigations and mapping are performed on an emergency-only basis. To meet the permit requirements for mapping the entire storm sewer system by 2021, Danville needs to be mapping 20-22 miles of stormwater sewers and about 2500-3000 structures each year. Once a dedicated stormwater funding source has been secured, Danville will pursue the mapping initiative required by Part IV.B.3.b of the permit.

With a dedicated camera truck and crew, as well as a dedicated vector truck and crew, properly trained in recording and adequately reviewing pipe inspection videos, we estimate 40-50 miles of stormwater pipe (along with an equal amount of sanitary sewer pipe) could be investigated and mapped each year. This would allow the entire system to be put on a 3 year inspection rotation, which would lead to a proactive maintenance program, preventing reactionary/emergency maintenance issues. This would require the funding to support 4 or 5 full time staff to perform pipe investigations and maintenance, as well as the funding to support the equipment needs of such a program.

Illicit Discharge Detection & Elimination: C.2 – Regulatory Control Program.

BMP Description – Identify, respond and eliminate illicit discharges of substances on streets, sidewalks and within sewers.

Status – The City of Danville has a several regulations which prohibit the placing or depositing (dumping) of substances on streets sidewalks and other public places. City code sections 93.04, 93.05 and 93.06 all address different aspects of dumping. City code sections 51.02 and 51.21 prohibit various waters or wastes from being discharged to any public storm or sanitary sewer or to otherwise be discharged untreated.

Appropriateness – BMP is appropriate for this target audience, as it provides several regulatory requirements to prevent pollution from being discharged into the City. It allows the City to pursue fines and/or legal action for persons caught dumping trash or liquid wastes. Fulfills the requirements of Part IV.B.3.c, d and e.

Progress – Complete. The City of Danville has had these regulations in place for many years. The regulations help to keep Danville safe and clean by prohibiting outright pollution.

Measurable goals and future milestones – Though the regulations have been in place for many years, instances of dumping, especially trash, still occur within the City. There were 93 code enforcement cases filed for illegal dumping this reporting year. 25 sites were cleaned up by the City of Danville.

Illicit Discharge Detection & Elimination: C.3 – Detection / Elimination Prioritization Plan.

BMP Description – Evaluate sewer mapping and televised sewers for cross connections and/or direct discharges to streams and ditches.

Status – The City of Danville has previously done little detection or elimination planning. Significant or emergency fixes were performed if cross-connections were found or sewer overflows were discovered. Problem areas are investigated and/or televised as reported or discovered. However, due to the limited number of stormsewer pipes being televised, very few sanitary cross connection(s) get found.

Appropriateness – BMP is appropriate, as it will provide a plan for maintenance of any sanitary sewer pipes incorrectly flowing into a stormwater pipe or outlet.

Progress – Partially Complete. The City of Danville televised approximately 5000 linear feet of stormwater pipes this reporting year. No major cross connections were discovered.

Some pipes in town have suspected cross connections within them. These large diameter pipes have long contributing networks, and are too large to utilize the CCTV camera. Smoke testing will be necessary to locate and trace the possible cross-connections. Due to limited staff and funding, they have not been adequately traced to find and eliminate the source(s).

Measurable goals and future milestones – All direct and/or obvious cross connections found will be eliminated on an emergency operations basis. Pipes that are damaged or otherwise require maintenance are prioritized by the Public Works department for future repairs. Public Works Construction department will continue to track needed maintenance. However, until a stormwater funding source is provided, non-emergency storm sewer pipe maintenance will not be completed.

Illicit Discharge Detection & Elimination: C.4 – Illicit Discharge Tracing Procedures.

BMP Description – Testing visual and/or laboratory testing of discharges identified during observed or public reported events.

Status – Tests are performed by visual inspection or laboratory testing of alleged illicit discharges and any confirmed illicit discharges found have a corrective action plan developed and implemented.

Appropriateness – BMP is appropriate, as suspected illicit discharges can be more readily identified by testing methods.

Progress – Complete. During the reporting year, no sanitary cross sections were found within the storm sewer system. 2 suspected illicit discharges of unknown sources were found as part of the Outfall Monitoring Program. Samples from one were collected and sent to the sanitary sewer district for testing due to concerns about some dead frogs in the outfall. There was a slight smell at the outfall, though it wasn't distinguishable. As a precaution, we collected a sample for laboratory analysis. Results came back as negative for any obvious pollutants. The death of the frogs may have been weather-related, or caused by something else entirely. Results from the samples submitted to the Sanitary District for testing are included in Appendix I.

Field crews were unable to trace a source of the other discharge. The discolored water had stopped flowing prior to the investigation, and seems to be a one-time occurrence. This outfall is now a high priority inspection point for the outfall monitoring program.

Measurable goals and future milestones – All suspected illicit discharges will be investigated and/or tested to try to identify the sources of the discharge. The number of illicit discharges found each year will be tracked.

Illicit Discharge Detection & Elimination: C.5 – Illicit Source Removal Procedures.

BMP Description – Develop plan of action for elimination of illicit discharges upon their discovery.

Status – The City of Danville has implemented a Standard Operating Procedure (SOP) for Sanitary Sewer Overflows (SSO) with Corrective Action, Documentation and Reporting Procedures.

Appropriateness – BMP is appropriate, as it provides a step-by-step operating procedure for City crews to follow in the event of an SSO and/or identified sanitary sewer cross connection. Helps fulfill Part IV.B.3.a.

Progress – Complete. The SOP has been in place since 2013, and Engineering and Public Works personnel are aware of the procedure.

15 sanitary sewer overflows occurred this year. Each of these was reported to the IEPA as required and rectified as quickly as possible.

Measurable goals and future milestones – The City has a goal of no SSOs or sanitary sewer cross connections. However, both pollution sources will likely occur in any city due to infrastructure, weather, or other circumstances. We will continue to track and eliminate SSOs and cross connections as they are found.

Illicit Discharge Detection & Elimination: C.7 – Visual Dry Weather Screening

BMP Description – Develop a method of recording data from dry weather outfall screening, to inspect outfall locations during dry weather by Year 3. Begin a detection and elimination program for any areas of concern found during inspections.

Status – To meet the newly required monitoring and assessment program, the City of Danville has implemented an outfall screening program. The outfall screening program is intended to inspect outfall locations during both dry and wet weather.

Appropriateness – BMP is appropriate, as dry weather inspections help to identify non-stormwater-related flows, which are often illicit discharges.

Progress – Partially Complete. The outfall monitoring program has been implemented (as documented in the Monitoring and Assessment Program portion of this report). A portion of the priority outfalls in Danville have been inspected this year. The visual dry weather screening will continue on an annual basis as a portion of the Monitoring and Assessment Program. Any significant or obvious sanitary cross connections or other illicit discharges are given to Public Works to investigate and remediate as emergency operations. Helps fulfill Part IV.B.3.h.

Measurable goals and future milestones – At the time of this report, the City of Danville has 123 known priority outfalls. Per the permit requirements, “major/high priority outfalls shall be inspected at least annually”. Of the 123 priority outfalls, 54 were inspected during dry weather this reporting year. Most of the outfall inspections are revealing significant maintenance requirements related to severe erosion, pipe degradation, sediment buildup, or trash and debris accumulation. Very few of the inspections have shown any significant indications of illicit discharges. More information regarding the outfall monitoring program can be found in that portion of this report. The number of outfalls inspected each year will be documented and reported.

Construction Site Runoff Control

Five BMPs were chosen under this minimum control measure.

Construction Site Runoff Control: D.1 – Regulatory Control Program.

BMP Description – Develop a new erosion control and sediment control ordinance to address construction site runoff control for all construction projects. Part IV.B.4.a.

Status – The City of Danville has developed an erosion control ordinance with the help of a contract design firm. The ordinance was taken before the City Council in May of 2017. It passed and becomes effective May 27, 2017, during the next reporting year.

Appropriateness – BMP is appropriate for this target audience, as it establishes a legal requirement for erosion control measures within the City of Danville. Any land disturbance of between 2000 sf and 1 acre will require a Class 2 Land Disturbance Permit. Any land disturbance of 1 acre or more will require a Class 1 Land Disturbance Permit (as well as an ILR10 permit)

Progress – Partially Complete. The City of Danville was audited in 2012. A “Regulatory Control Program” deficit, and a lack of an erosion and sediment control ordinance and detailed procedure for reviewing site plans were noted in the audit. A draft ordinance was created in the fall of 2016. Several stakeholder meetings took place over the fall and winter months to create the ordinance. The final draft was created and passed by the City Council during the 2017-2018 reporting year, and will be included in the next annual report.

The new ordinance has a fairly detailed checklist of items required for both classes of permit applications. The Class 1 sites will require IEPA ILR10 permits and will also be required to follow an inspection checklist created by the City to perform weekly and after-rain site inspections. The checklist is currently available for any contractor to use to meet the IEPA inspection requirements. http://www.danville-stormwater.org/uploads/6/7/5/0/6750232/final_esc_inspection_report.pdf

Currently, the City of Danville has updated its website to include a page titled “Site Design & Erosion Control Requirements.” The site includes links to information on site stormwater management requirements, ILR10 permit requirements, SWPPP requirements, and erosion control training opportunities. <http://www.danville-stormwater.org/site-design--erosion-control-requirements.html>

Measurable goals and future milestones – The new ordinance taking effect does not fall into this reporting year. Enactment of this ordinance and tracking these permits will be reported in the 2017-2018 annual report. We expect between 30 and 40 Class 2 permits, and 5 to 10 Class 1 permit applications per year.

Construction Site Runoff Control: D.2 – Erosion and Sediment Control BMPs.

BMP Description – As part of developing an ordinance for erosion and sediment control, ensure best management practices are followed by distributing a manual for erosion and sediment control. Part IV.B.4.a.ii

Status – The City of Danville has not developed a manual for erosion and sediment control. Links to the Illinois Urban Manual and the IDOT Erosion and Sediment Control Field Guide are both available on the City of Danville’s Stormwater webpage. <http://www.danville-stormwater.org/site-design--erosion-control-requirements.html>

We plan to utilize the Erosion Control Manuals from the City of Urbana as drafts for Erosion Control Manuals to be issued by the City of Danville, to accompany the Erosion Control Ordinance.

Appropriateness – This BMP is appropriate, as it provides guidance to design engineers and on-site contractors as to the proper use of standard erosion control measures. The Manuals will be posted to the city’s website once completed. For additional references, the City has also posted links to the Illinois Urban Manual and the IDOT Erosion and Sediment Control Field Guide on the webpage.

Progress – Incomplete - forthcoming. The Erosion and Sediment control manual has not yet been created. We plan to have a draft of the manuals available in June or July of 2017.

Measurable goals and future milestones – These manuals will be drafted during the spring/summer of 2017. We intend to have them available within a month or two of the new ordinance taking effect.

Construction Site Runoff Control: D.4 – Site Plan Review Procedures.

BMP Description – Review erosion control plans/practices submitted for each new site project. Part IV.B.4.a.v.

Status – The City of Danville hired a new part-time stormwater engineer in June 2016. She has 5 years' experience with stormwater management and erosion control regulatory review on the local and state level in the State of Maryland – a state with some of the more stringent SWM and E&S regulations in the country. She now reviews all plans for erosion control measures.

Appropriateness – This BMP is appropriate, as plans submitted for building and construction permits need to be designed for appropriate erosion control on site. Enactment of the erosion control ordinance helps fulfill the requirements listed in Part IV.B.4.a.i-vii in the MS4 permit.

Progress – Complete. Our stormwater engineer and assistant city engineer both perform plan reviews for stormwater management and erosion control. Upon the new erosion control ordinance taking effect, substantially more projects will be submitted for review. Staff time will need to be prioritized to ensure proper design reviews take place and that approved plans meet the Danville Ordinance, Erosion Control Manual, and Urban Manual requirements.

Measurable goals and future milestones – The City of Danville will continue to review all building plans for erosion control measures. Currently, the erosion control reviews are not tied to any specific code requirements, but are being reviewed as a Best Management Practice.

The new ordinance will require separate erosion control permit applications for each project. This will enable better tracking of projects requiring E&S controls. The number of Class 1 and Class 2 permits will be tracked and submitted each year.

Construction Site Runoff Control: D.5 – Public Information Handling Procedures.

BMP Description – Publicize and update as needed the existing online contact information for reporting soil erosion/sediment non-compliance issues. Part IV.B.4.a.vi.

Status – The City of Danville updated the stormwater management webpage in the summer of 2016. The new homepage includes a form to “Report a Stormwater Issue: Report flooding, erosion, pollution, or illegal dumping.” There is a second link on an additional page called “Stormwater Master Plan / Report a Problem” The information submitted is automatically sent to the City Engineer, Assistant City Engineer, and the Stormwater Engineer.

Separately, there is a “Report a Problem” page, on the Engineering and Urban Services website. <http://www.cityofdanville-eus.org/> Stormwater issues reported via this page are routed to the Assistant City Engineer. There are similar links within the Public Works and City of Danville’s homepages, as well. Citizens can report stormwater concerns, as well as, sanitary sewer, tree, streetlight, alley and other issues.

Appropriateness – This BMP is appropriate, as it easily allows citizens to report concerns related to stormwater management and pollution prevention, as required in Part IV.B.4.a.vi of the MS4 permit.

Progress – Complete. The links for reporting problems on all four pages have been recently updated.

Measurable goals and future milestones – The City of Danville will continue to monitor any issues reported via the online forms. During this reporting year, only one concern was reported, which was an issue with flooding on private property. No erosion control issues were reported by the public.

Construction Site Runoff Control: D.6 – Conduct Construction Site Inspections / Enforcement Procedures. (To Be Removed and Replaced)

BMP Description – Perform construction inspections for all site construction weekly or after rain events > 0.5 inches.

Status – The City of Danville performs random “spot-check” site inspections for permitted construction projects. Spot checks are often reactive to concerns expressed by building inspectors about the site conditions at a specific property. Contractors and/or ILR10 permit holders are responsible for completing the weekly and after-rain site inspections required by the permit.

Appropriateness – We have decided this BMP is not appropriate for the City of Danville. It is the permittee’s responsibility to fulfill the inspection requirements outlined in the ILR10 permit (weekly and after-rain inspections.) The City of Danville only performs occasional spot-checks to ensure contractors are maintaining their compliance with the issued permits, per Part IV.B.4.a.vii of the MS4 permit.

Progress – To be replaced. The City of Danville does not have the responsibility nor the staff to perform weekly inspections on all permitted construction sites. We will remove this BMP from our NOI, and replace it with a BMP to perform regulatory “spot-check” inspections to ensure the permittee is meeting the permit requirements for inspections and maintenance.

Measurable goals and future milestones – The City of Danville plans to remove this BMP from our NOI. Upon enactment of the new Erosion Control Ordinance, the City of Danville will need to devote significantly more time to performing the necessary “spot-checks” to ensure contractor compliance with both the ILR10 as well as the Class 1 and Class 2 permits issued by the City. However, Danville will only be performing “spot-checks” as an enforcement procedure. Danville will not be responsible for completing the weekly and after-rain inspections. This will be the sole responsibility of the permittee and/or their contractors.

It is the City of Danville’s goal to have the stormwater engineer and/or assistant city engineer visit each IEPA permitted construction site at least once during the course of construction, and more frequently if issues are noted. However, due to staffing constraints and the lack of an erosion control ordinance, few site erosion control visits are currently made.

Significantly more site inspections are anticipated in the future to fully enforce the new erosion control ordinance across many more permitted sites.

Post-Construction Runoff Control

Four BMPs were chosen under this minimum control measure.

Post-Construction Runoff Control: E.2.1 – Regulatory Control Program.

BMP Description – Use a formal checklist as a guide for final approval of construction site work.

Status – The City of Danville recently created an Erosion Control Inspection checklist. This checklist, though intended for inspections during construction, could be used for close-out inspections. We plan to integrate this into our close-out inspections in the coming year.

Appropriateness – This BMP is appropriate, as it provides a written guide for the contractors and the City to verify sites are compliant and ready for final approval.

Progress – Substantially Complete. The inspection form is completed. Incorporating its use into inspections and site final approvals will take place with enforcement of the new erosion control ordinance. This form can be found in Appendix H of this report.

Measurable goals and future milestones – The City of Danville plans to institute the use of this formal checklist beginning in the summer of 2017. Permitted projects will be tracked, and project status will be noted in next year's report.

Post-Construction Runoff Control: E.4– Pre-Construction Review of BMP Designs. (To Be Removed and Replaced)

BMP Description – Develop guidelines for site plan review of erosion and sediment control BMPs, so during permitting process we can ensure conformance with ordinances regulating erosion and sediment control BMPs.

Status - The post-construction BMPs are intended to relate to water quality BMPs, rather than Construction Site runoff control. This BMP will be removed and replaced with a more appropriate BMP for post-construction runoff control within the new NOI.

A new stormwater management ordinance, replacing the existing stormwater ordinance passed in 1994, was approved by the City Council in May 2017. The new ordinance has provisions for both water quantity and water quality management.

Appropriateness – This BMP will be removed, and replaced with a more appropriate BMP. The erosion control reviews are covered under the construction site runoff control measures. A new BMP concerning post-construction runoff control is included in the new NOI.

Progress – To be replaced.

Measurable goals and future milestones – The City of Danville plans to replace this BMP with a BMP more appropriate for post-construction runoff control.

Post-Construction Runoff Control: E.5 – Site Inspections During Construction. (To Be Removed and Replaced)

BMP Description – Have staff conduct site inspections of all construction sites to ensure construction is adhering to ordinances. A pre-construction meeting shall be set up for all large construction activities to review SWPPPs and discuss erosion and sediment control procedures. Site inspections shall be made weekly or when a reported issue is presented, documenting any deficiencies.

Status – The City of Danville currently performs “spot-check” inspections, as noted in Construction Site Runoff Control BMP5. This is a redundant BMP.

Appropriateness – We have decided this BMP is not appropriate for the City of Danville, as noted in Construction Site Runoff Control D.6 notes. Weekly construction site inspections are the responsibility of the permittee. Danville will continue to perform occasional “spot-check” site inspections to audit for compliance.

Progress – To be replaced. The City of Danville does not have the responsibility nor the staff to perform weekly inspections on all construction sites.

Measurable goals and future milestones – The City of Danville plans to remove this BMP from our NOI. The requirements of this BMP described have been fulfilled under the construction site runoff BMPs.

Post-construction BMPs are intended to relate to water quality BMPs, rather than construction site runoff control. This BMP will be removed and replaced with a more appropriate BMP for post-construction runoff control within the new NOI.

Post-Construction Runoff Control: E.6.1 – Post-Construction Inspections.

BMP Description – Inspect each permitted construction site during final inspection for conformance with the project specific BMPs as part of the building inspection process. Perform site inspections when issues are reported by the public.

Status – The City of Danville inspects sites to ensure full site stabilization (generally grass establishment and any stormwater detention pond stabilization) before building occupancy permits are issued, as well as upon any reported citizen concerns.

Site inspections for Water Quality BMPs will also be needed to ensure long-term functionality of green infrastructure practices, such as infiltration, reuse and evapotranspiration projects once more facilities are designed and installed per the new stormwater management ordinance. This will help fulfill the requirements of Part IV.B.5 of the MS4 permit.

Appropriateness – This BMP is appropriate as it will provide a needed final check for overall site compliance to ensure final site stabilization, as well as checks for water quality BMPs before they are accepted for stormwater management and/or water quality credits.

Progress – Complete. The City of Danville currently performs a final erosion control / site compliance inspection as part of the land disturbance / building permit process. Sites are required to meet site stabilization requirements before an occupancy permit is issued, unless an exception is made where an owner and the City agree to allow site stabilization after occupancy due to site constraints, etc.

Measurable goals and future milestones – The City of Danville plans to continue requiring site stabilization inspections as part of the building inspection process. The City of Danville will also perform water quality BMP inspections as they are constructed. We plan to track all new Class 1 and Class 2 erosion control permits, as well as all new water quality BMPs approved and constructed under the new stormwater ordinance.

Pollution Prevention & Good Housekeeping

Seven BMPs were chosen under this minimum control measure.

Pollution Prevention & Good Housekeeping: F.1 – Employee Training Program.

BMP Description – Provide training for employees for storm water quality issues or that have routine contact with chemical substances, pesticides, and herbicide applications, salt and calcium applications, or abatement and containment of hazardous material spills.

Status – The City of Danville recently purchased the Rain Check Stormwater Pollution Prevention for MS4s training DVD. This video provides a 30 minute overview of pollution prevention awareness and techniques for 12 topics: Good Housekeeping & Spill Prevention, Spill Control & Response, Vehicle Fueling, Vehicle & Equipment Maintenance, Vehicle & Equipment Washing, Materials Management, Waste management, Municipal Facility Maintenance, Parking Lots & Streets, Storm Drain System Cleaning, Landscaping & Grounds Maintenance, and Working Over or Near Surface Waters.

Appropriateness – This BMP is appropriate, as it provides an easy-to-follow awareness training for our Public Works operations crew members. It meets the requirements to develop and implement an operations and maintenance program that includes an annual training component for municipal staff and contractors, designed to prevent and reduce discharge of pollutants, as per Part IV.B.6.a-d.

Progress – Complete. We trained 23 operations crew members and managers in November 2016. All watched the training video, then had the opportunity for questions and answers.

Measurable goals and future milestones – The City of Danville will continue to have the Public Works Operations personnel take this training annually. We also hope to include the Parks Department crews this year. We will report the number of staff trained each year.

Pollution Prevention & Good Housekeeping: F.2.1 – Inspection and Maintenance Program.

BMP Description – Provide routine maintenance to all public storm water infrastructure as needed and per maintenance schedule. Document maintenance activities.

Status – The City of Danville currently only performs storm water infrastructure maintenance on an as-needed basis. We have not established a maintenance schedule. We are developing a stormwater pond inventory (private and public), a green infrastructure inventory (private and public), and mapping the storm sewer piping.

Additionally, the outfall inspections now being performed per the Monitoring and Assessment Program, are prioritizing outfall maintenance. The outfall maintenance is only being performed on an as-needed basis for emergency work discovered during the inspections. Long-term maintenance needs are being documented with the goal of retrofitting outfalls once stormwater funding becomes available.

Appropriateness – This BMP is appropriate, as it provides maintenance for the most severely degraded infrastructure. However, Danville needs to develop a means of funding routine stormwater infrastructure maintenance, and inspection and regulation of maintenance for private stormwater infrastructure. A continued lack of preventive maintenance will cause long-term problems for the City as the infrastructure continues to age. Helps fulfill Part IV.B.6.b.iv.

Progress – Partially Complete. The City of Danville used closed circuit television to inspect approximately 5000 LF of stormwater piping this year. 6000 LF of pipes were cleaned or maintained. 33 miles of ditchlines were mowed. 1140 inlets were cleared at the surface/grate. 70 LF of pipes were rehabilitated/removed and replaced/or otherwise repaired, 2 private stormwater basins were inspected by City personnel.

Measurable goals and future milestones – The City of Danville will continue to maintain critical stormwater infrastructure on an as-needed basis.

To meet the inspection and maintenance goals set forth in the Stormwater Master Plan, 10% of the stormsewer piping in the City is to be inspected and maintained each year. To fully meet this goal, approximately 12 miles of stormwater pipe needs to be inspected each year. Other stormwater infrastructure such as wet and dry ponds should be inspected at least once every 3 years. There are about 70 in the City, so about 25 facilities should be inspected each year.

Green infrastructure BMPs should be inspected at least every three years. Currently, there are 5 facilities in the City. At least 2 should be inspected each year, with more being added to the inspection list as green infrastructure facilities are added to meet the upcoming water quality requirements of the new stormwater ordinance.

Pollution Prevention & Good Housekeeping: F.2.2 – Inspection and Maintenance Program.

BMP Description – Prepare Storm Water Pollution Prevention Plans (SWPPP) for all applicable municipal facilities and conduct an annual inspection with report.

Status – The City of Danville wrote a SWPPP for the Public Works Maintenance Facility in January 2014. A SWPPP inspection for the Public Works Maintenance Facility was performed in August 2016. After the inspection, the SWPPP was updated to include all applicable information.

Using the Public Works Maintenance Facility SWPPP as a general reference, a SWPPP inspection was performed in August 2016 for the South Street Storage Facility as well. After the inspection, a draft SWPPP was created for the South Street Storage Facility.

Appropriateness – This BMP is appropriate, as it provides a written and visual report for the Public Works managers to know where to focus maintenance, good housekeeping and training efforts. Items reviewed during the inspection included Federal Spill Prevention, Control, and Countermeasure (SPCC) requirements, as well as ILR40 Part IV.B.6.b pollutant management points such as vehicle and equipment washing, storage of chemicals, fuels/oils, stockpiles, landscape and construction debris, fuel and oil leaks, erosion, and control of trash and other debris, etc.

Progress – Substantially Complete.

The Public Works Facility inspection found 10 items of significant concern, 38 of moderate concern, and 11 of minor concern. The South Street inspection found 5 items of significant concern and 14 of moderate concern.

The Public Works department worked throughout the fall to remove or remediate the items of concern found during the inspection. A large portion of them have been taken care of, though a few of the significant concerns remain at both locations. Several of the more minor items are outstanding as well.

A large portion of the South Street facility was sold in March 2017 and will no longer be used by the City of Danville. The only portions of the site which will remain in use by the City are the salt dome and the sanitary dump station.

Measurable goals and future milestones – The City of Danville will continue to perform an annual site inspection of both facilities each summer or fall. We hope to see a drop in the number of items of concern each year as the employees learn to better manage equipment and materials, and become more aware of pollution prevention measures through the newly established annual training.

The City of Danville plans to track the items of concern, with a goal of reducing the number of items of concern by at least 10% each year, until we can maintain a level of about 20 items of concern, or less, each year at each facility.

Pollution Prevention & Good Housekeeping: F.4.1 – Municipal Operations Waste Disposal.

BMP Description – Maintain garbage and yard waste collection, which is provided on a weekly basis to keep waste out of storm sewer systems.

Status – The City of Danville provides regular weekly garbage pickup to all residents. The City also has a “large pickup” program for unusually large trash pickups. However, this program has additional costs for citizens. And as such, illegal dumping still occurs within the City occasionally. There were 93 code enforcement cases filed for illegal dumping this reporting year. 25 sites were cleaned up by the City of Danville. The yard waste program, which is a fee-for-service program, collected 420 tons of grass, 252 tons of leaves, and 346 tons of brush during the 2016 Calendar Year. This was all taken to the composting facility.

Appropriateness – This BMP is appropriate, as it provides a regular means of disposal of waste for residents. Dumping is explicitly illegal, per city code, which helps deter incidences of solid waste disposal outside of controlled areas. Part IV.B.6.b.ii

Progress – Complete. Regular weekly trash collection is provided to all residents as part of the City’s services to its residents. Incidences of illegal dumping are removed as reported.

Measurable goals and future milestones – The City of Danville will continue to have weekly trash pickup services, as well as the Public Works Operations personnel remove all occurrences of illegal dumping. The yard waste program will continue to be offered to residents as a fee-for-service program.

Pollution Prevention & Good Housekeeping: F.4.2 – Municipal Operations Waste Disposal.

BMP Description – Control vehicle and equipment washing by performing all Public Works vehicle washes in an enclosed washing bay which drains to sanitary sewer.

Status – The City of Danville has plans to construct an enclosed wash bay during the summer of 2017. This wash bay will either re-use the wash water, or will discharge the water to an oil-water separator, before it flows to the sanitary sewer. Currently all vehicles are washed on an asphalt and gravel parking lot which drains directly to the storm sewer system. The wash water released contains any soaps, detergents, grease, oil, or dirt which comes off the vehicles.

Appropriateness – This BMP is appropriate, as it will provide the treatment needed to ensure the wash water discharged is not polluted as required per Part IV.B.6.b.i.. The current discharge is a direct discharge of pollution, and remedying this is a central focus of the updated Public Works Facility SWPPP. Part IV.B.6.b.ii

Progress – Incomplete / forthcoming. The wash bay facility is slated for construction during the summer of 2017. Until it is constructed and in-use, the City of Danville is out of compliance with the MS4 permit. Approximately 16 vehicles are washed on a monthly basis. An estimated 320 gallons of wash water, using an estimated 5 gallons of Grrr Heavy Duty Cleaner are used monthly.

Measurable goals and future milestones – The City of Danville plans to have the wash bay constructed during the summer of 2018. A temporary wash bay is planned to be constructed during the summer of 2017. This will prevent an estimated 3900 gallons of polluted wash water from discharging to the stormwater system each year.

The oil-water separator used will be monitored and maintained on an annual basis to ensure proper functioning, to prevent further pollution.

Pollution Prevention & Good Housekeeping: F.4.3 – Municipal Operations Waste Disposal.

BMP Description – Maintain an oil and fluid disposal program to dispose of oils and fuels by a licensed waste hauler. Dispose of oil every other month, and other fluids as-needed.

Status – The City of Danville maintains an oil and fluid disposal/recycling program for city-owned maintenance use. We contract with a waste-hauler to recycle the oil, oil filters, and fluids collected at a licensed recycling facility.

Appropriateness – This BMP is appropriate, as it provides an easy means for Public Works employees to dispose of oil, oil filters, and other waste-fluids collected, reducing the incidences of disposal on the ground or into storm drains. This helps fulfill the requirements of Part IV.B.6.b.ii of the MS4 permit.

Progress – Complete. Public Works maintains a 300 gallon drum for oil collection at the Public Works Facilities. An estimated 600 gallons of used oil was collected this year. There are also 2 drums for used oil filters. Approximately 200 used oil filters were collected this year.

Public Works maintains drums for Diesel Exhaust Fluid, anti-freeze, hydraulic oil, 5W20 oil, 15W40 oil, transmission fluid, windshield solvent, and red grease. All wastes are collected by a licensed recycling facility.

Measurable goals and future milestones – The City of Danville will continue to collect used oil, oil filters, and other waste-fluids. Volumes will be tracked or estimated based on service records.

Pollution Prevention & Good Housekeeping: F.6 – Other Municipal Operations Controls.

BMP Description – Sweep all streets in the City at least once before September and twice between September and November, reducing storm sewer clogging at inlets and piping. Increase the street sweeping frequency as needed.

Status – The City of Danville maintains a street sweeping program, as required in BMP 5.E. Materials swept up are collected at the Public Works facility, where they are screened (to remove trash and other debris) and then composted. Finished materials are used for backfill for demolition projects.

Appropriateness – This BMP is appropriate, as it provides an easy means of clearing clogged street gutters, especially in the fall during leaf-drop. This reduces flooding due to clogged inlets and pipes. It also removes a large volume of organic matter from the waterways. Degraded organic matter can contribute to pollution and algae blooms in waterways. Additionally, the properly composted material provides a value-added product for the citizens.

Progress – Complete. Danville has approximately 389 exterior lane-miles of roads. An estimated 275-300 of these have curb and gutter and are thus swept as part of this program.

A total of 3687 lane-miles were swept this reporting year, collecting a total of 3663 cubic yards of debris from the roadways. Each lane-mile is swept twice during each session to ensure all debris is collected. The City of Danville averaged 230 lane-miles per month during the 10 months excluding October and November. 674 and 718 lane-miles were swept during these two fall months, respectively, to remove the increased leaf debris. This amounts to each curbed roadway in town being swept an average of 4 sweeping session per year. This program helps fulfill Part IV.B.6.b.ii and Part IV.B.5.e.ii.G.

Measurable goals and future milestones – The City of Danville will continue to maintain a street sweeping program. Street sweeping efforts are focused on areas known to flood and/or receive a heavy accumulation of leaf debris. Roads with no stormwater collection system are considered a lower priority.

Miles of roadway swept and tons of materials collected will continue to be recorded.

B. CHANGES TO BEST MANAGEMENT PRACTICES (BMPs)

The City was issued a General NPDES permit on February 10, 2016 with an effective date of March 1, 2016. This permit expires February 28, 2021.

Though a renewed NOI was submitted on September 27, 2013 for the previous permit cycle to be in compliant with IEPA requirements, the City of Danville is submitting a new NOI to outline our intentions to meet the newly issued NPDES Permit. This annual report serves as an evaluation of the period Year 1 of the new permit coverage in accordance with the requirements of the IEPA.

To account for changes to the new permit, as well as to clarify the City's commitments on certain BMPs and our ability to fulfill the requirements of the permit, the City of Danville is submitting a new NOI along with this annual report. The newly outlined commitments better align with action items and measurable milestones we can fulfill on an annual basis. Under all circumstances, the basic requirements for the 6 BMPs will still be met by the proposed activities.

Listed below are changes to the BMPs, either additions or removals, to meet the requirements of the newly issued permit.

1. **Add B.3 – Stakeholder Meeting.** To meet ILR40 Part IV.B.2.c “Provide a minimum of one public meeting annually for the public to provide input as to the adequacy of the permittee’s MS4 program”.
2. **Add B.6 – Program Involvement.** To meet ILR40 Part IV.B.2.d “The Permittee shall identify environmental justice areas within its jurisdiction and include appropriate public involvement/participation”.
3. **Remove D.6 – Conduct Construction Site Inspections / Enforcement Procedures.** The City of Danville will no longer have the BMP to perform construction site inspections for all site construction weekly or after rain events.
4. **Add D.6 – Conduct Construction Site Inspections / Enforcement Procedures.** The City of Danville will now have the BMP to perform random construction site inspections for enforcement of erosion control and stormwater management requirements at permitted construction sites, with the goal to visit each site at least once during construction and once during close-out.
5. **Add E.1.1 - Community Control Strategy.** Within 3 years of this permit (NLT Mar 1, 2019), develop and implement a process to assess the water quality impacts in the design of all new and existing flood management projects that discharge to the MS4.
6. **Add E.1.2 – Community Control Strategy.** Develop and implement a program to minimize the volume of stormwater runoff and pollutants from public surfaces through
 - i. Annual training for all MS4 employees who manage or are directly involved in routine maintenance, repair, or replacement of public surfaces in green infrastructure.
 - ii. Annual training for all contractors retained to manage or carry out routine maintenance, repair or replacement of public surfaces in green infrastructure or LID techniques.

7. **Add E.2.2 – Regulatory Control Program.** Require all regulated construction sites to have post-construction management plans that meet or exceed the requirements of ILR10.
8. **Add E.2.3 – Regulatory Control Program.** Require long-term operation and maintenance plans for all new stormwater management facilities.
9. **Add E.2.4 – Regulatory Control Program.** Develop, implement and enforce a program to address and minimize the volume and pollutant load of stormwater runoff from projects from new development and redevelopment, adopting strategies that incorporate the infiltration, reuse and evapotranspiration of stormwater into the project to the maximum extent practicable.
10. **Remove E.4 – Pre-construction Review of BMP Designs.** Danville will no longer have the BMP to “develop guidelines for site plan review of erosion and sediment control BMPs”. This BMP is effectively covered in the Construction Site Runoff Control portion of the permit.
11. **Add E.4 – Pre-construction Review of BMP Designs.** Review all water quality BMPs for effective water quality and water quantity control.
12. **Remove E.5 – Site Inspections During Construction.** The City of Danville will no longer have the BMP to “have staff conduct site inspections of all construction sites to ensure construction is adhering to ordinances.” This BMP is effectively covered in the Construction Site Runoff Control portion of the permit.
13. **Add E.5 – Site Inspections During Construction.** Require owners / permittees to perform regular site inspections during the life of a construction project. Provide a formal checklist for Class 1 permitted sites to fulfill erosion control requirements for weekly and after-rain inspections.
14. **Add E.6.2 – Post-construction Inspections.** Perform maintenance inspections of all stormwater facilities water quality and water quantity BMPs, or request maintenance records from owners of said BMPs, at least once every 3 years. Follow up with owners for needed maintenance.
15. **Add E.7 - Other Post-Construction Runoff Controls.** Develop and implement a program to minimize the volume of stormwater runoff and pollutants from existing privately owned developed property.
16. **Add F.4 – Municipal Operations Waste Disposal.** Maintain a proper disposal area for all vector truck disposal materials from both sanitary and storm sewer systems. All liquids shall be discharged to the sanitary sewer system and all dry materials collected and disposed of as solid waste.

Public Participation & Involvement B.3 – Stakeholder Meeting.

BMP Description – Provide a minimum of one public meeting annually for the public to provide input as to the adequacy of the permittee’s MS4 program.

Status – The City of Danville has established the February Public Works Committee Meeting (held the second Tuesday of each month), to be our annual MS4 program evaluation meeting.

Appropriateness – This BMP is appropriate, as it is an opportunity for citizens to provide comments or suggestions about the MS4 program, and meets the requirements of ILR40 Part IV.B.2.c.

Progress –Complete. Danville hosted this annual meeting. Notices were posted on the City’s homepage and the Stormwater Management webpage. No citizen concerns were voiced at the meeting.

Measurable goals and future milestones – The City of Danville will continue to host this public meeting each year.

Public Participation & Involvement B.6 – Identify Environmental Justice Areas.

BMP Description – Identify environmental justice areas and include appropriate public involvement/participation.

Status – The City of Danville has not yet established environmental justice areas or implemented public involvement/participation in these areas.

Appropriateness – This BMP is appropriate, as it is an opportunity to engage portions of the community which are often underserved by the “development, implementation, and enforcement of environmental laws, regulations, and policies”. Danville has a large portion of the population that is below the poverty line, as well as a large minority population.

Progress – Incomplete. Danville has not yet established environmental justice areas.

Measurable goals and future milestones – The City of Danville will pursue identifying the EJ areas within town during this reporting year. We will plan to engage with the aldermen of the ward(s) identified, and will explore various ways to include appropriate involvement/participation with their citizen group(s) this year.

Construction Site Runoff Control: D.6 – Conduct Construction Site Inspections / Enforcement Procedures.

BMP Description – Conduct construction site inspections as a means to "spot-check" owners/contractors/permittees to ensure they are fulfilling their permit requirements for regular inspections and maintenance. Document and track inspections.

Status – The City of Danville performs random “spot-check” site inspections for permitted construction projects. Inspect all site construction sites at least once during the project to verify owners/contractors/permittee are fulfilling their permit requirements. Perform close-out inspections to authorize permit closeout / occupancy authorizations at the end of a project to ensure site is fully stabilized before permit is closed. Document and track inspections. Contractors and/or ILR10 permit holders are responsible for completing the weekly and after-rain site inspections required by the permit.

Appropriateness – This BMP is appropriate for the City of Danville, as it fulfills the requirement of Part IV.B.4.a.vii. It is the permittee’s responsibility to fulfill the inspection requirements outlined in the ILR10 permit (weekly and after-rain inspections.) The City of Danville performs occasional spot-checks to ensure contractors are maintaining their compliance with the issued permits.

Progress – Partially Complete. The City of Danville performs occasional site inspections.

Measurable goals and future milestones –Upon enactment of the new Erosion Control Ordinance, the City of Danville will need to devote significantly more time to performing the necessary “spot-checks” to ensure contractor compliance with both the ILR10 as well as the Class 1 and Class 2 permits issued by the City. However, Danville will only be performing “spot-checks” as an enforcement procedure. Danville will not be responsible for completing the weekly and after-rain inspections. This will be the sole responsibility of the permittee and/or their contractors.

It is the City of Danville’s goal to have the stormwater engineer and/or assistant city engineer visit each IEPA permitted construction site at least once during the course of construction, and more frequently if issues are noted, as well as at close-out.

Post-Construction Runoff Control BMP E.1.1 - Community Control Strategy

BMP Description – Within 3 years of this permit (NLT Mar 1, 2019), develop and implement a process to assess the water quality impacts in the design of all new and existing flood management projects that discharge to the MS4.

Status – The City of Danville will need to develop this process within the next 2 years to meet the permit requirements.

Appropriateness – It will meet the outlined requirements within part IV.B.5.k of the ILR40 permit

Progress: Incomplete.

Measurable goals and future milestones – City of Danville will develop and implement this process within the next 2 years.

Post-Construction Runoff Control BMP E.1.2 - Community Control Strategy

BMP Description – Develop and implement a program to minimize the volume of stormwater runoff and pollutants from public surfaces through

- i. Annual training for all MS4 employees who manage or are directly involved in routine maintenance, repair, or replacement of public surfaces in green infrastructure.
- ii. Annual training for all contractors retained to manage or carry out routine maintenance, repair or replacement of public surfaces in green infrastructure or LID techniques.

Status – This community control program has yet to be developed.

Appropriateness – This BMP is a direct requirement of the MS4 permit, per section PartIV.B.5.d, but also provides a necessary training for crew members as the City of Danville begins to develop and construct LID facilities. Employees and contractors installing such facilities need to be properly trained on installation and maintenance procedures to ensure the facilities are built as needed to work effectively.

Progress: Incomplete. The City of Danville needs to find or develop an appropriate training program as soon as possible to facilitate the construction of LID facilities that will accompany the new stormwater ordinance, and the water quality treatment requirements within the ordinance.

Measurable goals and future milestones – Danville hopes to find an external training module, or create an appropriate internal training module before the end of the next reporting year.

Post-Construction Runoff Control BMP E.2.2 - Regulatory Control Program

BMP Description – Require all regulated construction sites to have post-construction management plans that meet or exceed the requirements of ILR10.

Status – All construction sites of 1.0 acres or more are required to receive an ILR10 permit issued by the Illinois EPA per the current and new revision of the stormwater ordinance.

Appropriateness – It meets the state requirements for construction sites to comply with the ILR10 permit, per Part IV.B.5.h.

Progress: Complete – City ordinance has required the ILR10 permit for many years.

Measurable goals and future milestones – City of Danville will continue to require the ILR10 permit issuance and will track permits issued within the City. As of the end of this reporting year, there were 9 open ILR10 permits in the City and 5 more which have been closed out through the NOT process within the last reporting year.

Post-Construction Runoff Control BMP E.2.3 - Regulatory Control Program

BMP Description – Require long-term operation and maintenance plans for all new stormwater management facilities.

Status – The new stormwater ordinance will include chapter 162.07 – Operations and Maintenance, which covers the requirement for a written plan to be approved as part of the overall stormwater management plan approval process.

Appropriateness – This BMP creates a regulatory requirement for long-term upkeep of stormwater management facilities, to ensure their functionality continues in perpetuity. This includes provisions for regular inspections and maintenance requirements by the owner.

Progress: Incomplete – forthcoming.

Measurable goals and future milestones – The City of Danville passed the stormwater ordinance in May 2017. We plan to develop an inventory of all green infrastructure practices approved as part of the construction/stormwater permitting process. All operation and maintenance plans will be recorded with the Recorder of Deeds of Vermilion County, as part of the property records.

If a significant number of construction sites fall under the new permit requirements for both Class 1 and Class 2 permits, as well as a significant number of water quality stormwater BMPs are constructed, the City of Danville may need to look to hiring a part-time or full-time inspector just for erosion control and post-construction inspections and enforcement.

Post-Construction Runoff Control BMP E.2.4 – Regulatory Control Program

BMP Description – Develop, implement and enforce a program to address and minimize the volume and pollutant load of stormwater runoff from projects from new development and redevelopment, adopting strategies that incorporate the infiltration, reuse and evapotranspiration of stormwater into the project to the maximum extent practicable.

Status – The City of Danville has drafted a new stormwater ordinance which incorporates both water quantity and water quality control into site stormwater management requirements. Class 2 projects (2000 sf – 1 acre) will have the option of doing either water quantity or water quality control. Class 1 projects (1 acre or more) will be required to provide both water quantity and quality control.

Appropriateness – This BMP is appropriate, as it creates a regulatory mechanism for development and redevelopment projects to begin incorporating green infrastructure practices within the City of Danville, as required per Part IV.B.5.a.

Progress: Incomplete – forthcoming. All development and redevelopment that disturbs 2000 sf or more of land will have to meet the requirements of the stormwater management ordinance, which includes water quality requirements.

Measurable goals and future milestones – The City of Danville passed a new stormwater ordinance in May 2017. Once adopted, we will develop an inventory of green infrastructure practices. All projects approved with water quality BMPs under the new ordinance will be tracked and reported each year.

If a significant number of construction sites fall under the new permit requirements for both Class 1 and Class 2 permits, as well as a significant number of water quality stormwater BMPs are constructed, the City of Danville may need to look to hiring a part-time or full-time inspector just for erosion control and post-construction inspections and enforcement.

Post-Construction Runoff Control BMP E.4 – Pre-Construction Review of BMP Designs

BMP Description – Perform site plan reviews for stormwater BMPs to ensure water quality and water quantity control, as well as constructability and long-term operation and maintenance.

Status – The city of Danville has drafted a new stormwater ordinance which incorporates both water quantity and water quality control into site stormwater management requirements. Class 2 projects (2000 sf – 1 acre) will have the option of doing either water quantity or water quality control. Class 1 projects (1 acre or more) will be required to provide both water quantity and quality control.

The City of Danville hired a new part-time stormwater engineer in June 2016. She has 5 years' experience with stormwater management (including green infrastructure design and inspection) and erosion control regulatory review on the local and state level in the State of Maryland – a state with some of the more stringent SWM and E&S regulations in the country. She will be reviewing all applicable plans for green infrastructure BMP design criteria.

Appropriateness –This BMP is appropriate, as plans submitted for building and construction permits need to be designed for stormwater management criteria, including water quality design, constructability, and operation and maintenance. Enactment of the revised stormwater ordinance helps fulfill the requirements listed in Part IV.B.5.a and .b in the MS4 permit.

Progress: Incomplete – forthcoming. All development and redevelopment that disturbs 2000 sf or more of land will have to meet the requirements of the stormwater management ordinance, which includes water quality requirements.

Measurable goals and future milestones – The City of Danville passed a new stormwater ordinance in May 2017. Once adopted, all water quality BMPs will be reviewed as part of the permitting process, and will be tracked and reported each year.

Post-Construction Runoff Control BMP E.5 – Site inspections During Construction

BMP Description – Require owners / permittees to perform regular site inspections during the life of a construction project. Provide a formal checklist for Class 1 permitted sites to fulfill erosion control requirements for weekly and after-rain inspections.

Status – Upon enactment of the new erosion control ordinance, all permittees will be required to perform regular site inspections and subsequent maintenance, to meet the requirements of Part IV.B.4.a.vii, as well as Parts IV.B.4.a.i and .iv of the MS4 permit.

The City of Danville will perform random enforcement “spot check” inspections, to verify permittees are fulfilling their inspection and maintenance requirements.

Appropriateness – This BMP is appropriate, as it provides a regulatory enforcement measure for on-site due diligence. City of Danville employees will perform random / occasional enforcement inspections, as a means of verifying permittees are fulfilling their inspection and maintenance requirements.

Progress: Partially Complete. The new erosion control ordinance and subsequent regulatory requirements will become effective May 27, 2017. Current inspections by City personnel occur on occasion to enforce IRL10 requirements.

Measurable goals and future milestones – The City of Danville will track permits as well as site inspections upon approval of the erosion control ordinance.

If a significant number of construction sites fall under the new permit requirements for both Class 1 and Class 2 permits, as well as a significant number of water quality stormwater BMPs are constructed, the City of Danville may need to look to hiring a part-time or full-time inspector just for erosion control and post-construction inspections and enforcement.

Post-Construction Runoff Control BMP E.6.2 – Post-Construction Inspections

BMP Description – Perform maintenance inspections of all City-owned water quality and water quantity stormwater facilities at least once every 3 years. Perform maintenance inspections or request maintenance inspection records of all privately owned water quality and water quantity stormwater facilities at least once every 3 years.

Status – The City of Danville recently created an inventory of all known green infrastructure BMPs, as well as all known stormwater management wet and dry ponds.

The City of Danville began performing inspections of wet ponds within the City.

This will be more imperative as the new stormwater ordinance specifically requires operations and maintenance agreements, with all stormwater facilities requiring regular inspections once every 3 years.

Appropriateness – This BMP is appropriate, as it ensures the functioning of critical stormwater facilities within the City, and helps fulfill Part IV.B.5.i of the permit to “ensure adequate long-term operation and maintenance of BMPs.” Accompanies BMP F.2 Inspection and Maintenance Program.

Progress - Partially complete. The City has created an inventory of known BMPs. 2 stormwater ponds were inspected last year. Follow up with owners resulted in maintenance which hadn't been performed in many years.

Measurable goals and future milestones – The city of Danville will try to inspect several stormwater BMPs each year. There are 68 stormwater ponds, 2 underground storage facilities, and 5 water quality BMPs currently in Danville. The City owns 6 wet ponds, 1 dry basin, and 2 green infrastructure facilities. All inspections will be tracked and follow-ups performed with owners. A concerted effort will be needed to ensure all facilities are inspected, or that maintenance records are requested and followed up on, for each facility in the City.

The City of Danville plans to Perform inspections or verify inspection records for all stormwater BMPs once every 3 years (as required by updated stormwater ordinance), to meet Part IV.B.5.i. This will be especially important into the future, as the updated stormwater ordinance specifically requires maintenance for stormwater facilities once every 3 years.

Post-Construction Runoff Control BMP E.7 - Other Post-Construction Runoff Controls

BMP Description – Develop and implement a program to minimize the volume of stormwater runoff and pollutants from existing privately owned developed property.

- i. through source identification establish an inventory of stormwater and pollutants discharged to the MS4
- ii. implementation of appropriate BMPs to accomplish:
 - a. education on green infrastructure BMPs
 - b. evaluation of existing flood control techniques to determine the feasibility of pollution control retrofits
 - c. evaluation of existing flood control techniques to determine the potential impacts and effects due to climate change.
 - d. implementation of additional controls for special events expected to generate significant pollution.
 - e. implementation of appropriate maintenance programs
 - f. management of pesticides and fertilizers
 - g. street cleaning in targeted areas.

Status – Portions of the permit requirements and status of each:

- i. not yet addressed
- ii.
 - a. some information on green infrastructure is available on the website www.danville-stormwater.org
 - b. the City of Danville Stormwater Master Plan was finalized in April 2016. The plan provides a comprehensive review of stormwater concerns, program needs, and large-scale retrofit projects to help address the growing problems of flooding and pollution control within the City of Danville. More information on the Master Plan can be found in section H.1 of this report.
 - c. Not yet addressed.
 - d. As a standard practice, the City of Danville employs crews onsite throughout the duration of large-scale events (such as the Balloon Festival in July 2016, Arts in the Park, and the Vermilion River Festival), to pick up and remove trash and other pollutants. A roll off dumpster was on site throughout the event. Crews also do a final sweep of the grounds before leaving the site.
 - e. All City of Danville municipal fleet maintenance is done indoors within the maintenance garage.
 - f. 6 people within the Parks department and 7 people within the streets department have pesticide applicator licenses. No other personnel within the City of Danville are allowed to use pesticides and fertilizers for municipal purposes. All pesticides, herbicides and fertilizers are housed indoors at the Parks Department building or at the Golf Course maintenance facility.
 - g. The City of Danville operates a regular street sweeping program. During the reporting year, 3663 yards of leaves and materials were collected. Materials swept up are collected at the Public Works facility, where they are screened (to remove trash and other debris) and then composted. Finished materials are used for backfill for demolition projects. See BMP F.6.

Appropriateness – This BMP partially fulfills the variety of requirements within Section IV.B.5.e of the MS4 permit.

Progress: Partially Complete.

Measurable goals and future milestones – The City of Danville will continue to pursue the various goals of this BMP.

Pollution Prevention / Good Housekeeping BMP F.4.4 – Municipal Operations Waste Disposal.

BMP Description – Maintain a proper disposal area for all vactor truck disposal materials from both sanitary and storm sewer systems. All liquids shall be discharged to the sanitary sewer system and all dry materials collected and disposed of as solid waste.

Status – The city of Danville maintains a small concrete pad dumping/drying bed. Vactor trucks dump the materials collected from the sewer systems onto the pad for disposal. Effluent discharges to the sanitary sewer, while the large materials are filtered out to dry and are removed by endloader as solid waste. The system is very basic, and the facility is old. The filter provided is a 4” screen mesh, which is often compromised due to the way the materials are removed.

Up until September 2016, the vactor truck dumped sanitary sewer collections into the disposal area. The vactor truck dumped storm sewer collections onto the ground near the adjacent creek. This was causing erosion and direct discharge of pollutants to the creek. Since this practice was discovered during the SWPPP inspection, all vactor truck disposals now take place in the drying bed.

Appropriateness – This BMP is appropriate, as the debris collected from both the storm and sanitary sewers needs to be filtered and disposed of as solid waste. The effluent needs to be treated at the wastewater treatment plant, and no discharges should be released directly to the ground.

Progress – Complete. As of September 2016, all vactor truck waste is disposed of at this drying bed, in another sanitary manhole, or at the Danville Sanitary District. Approximately 365 truckloads of sanitary waste and 1095 truckloads of storm sewer waste are collected each year. Each load is 2100 gallons. Sanitary waste collected by vactor truck is approximately 766,500 gallons per year; Stormwater waste collected by vactor truck is approximately 2,299,500 gallons per year.

Measurable goals and future milestones – Public Works will continue to bring all vactor truck collections to this facility for disposal. We will track the number of truckloads of materials collected each year.

Additionally, Public Works is looking into the possibility of constructing a new filter facility, with a larger capacity and a better filter system. This may be a newer concrete pad, or possibly a dewatering rolloff container. The City of Danville hopes to have a new facility by the end of the next reporting year, if funds can be made available.

C. RESULTS OF INFORMATION COLLECTED AND ANALYZED

1 – Data Collected during Monitoring and Assessment Program

All monitoring data collected and analyzed during the reporting period was visual observation only, except for one sample collected for lab analysis. A blank copy of the visual inspection report is included in Appendix F. Most of the information is auto-populated from the in-field collection. However, some notes and any additional information considered beneficial for the report is added while in the office. The reports are filed in the Engineering division, as well as given to Public Works Operations to address maintenance and inspection concerns.

Between November 1, 2016 and February 28, 2017, 54 outfalls were inspected. 1 outfall had a highly questionable discharge, with a distinct red color. We were unable to trace a source, and it had ceased upon inspection. Another outfall into a stormwater pond had several dead frogs located in it. There was a slight smell at the outfall, though it wasn't distinguishable. As a precaution, we collected a sample for laboratory analysis. Results came back as negative for any obvious pollutants. The death of the frogs may have been weather-related, or caused by something else entirely.

Seven outfalls had minor discharge concerns (usually trace suds at the outfall). Forty outfalls had moderate to severe maintenance needs (five of these also had the discharge concerns). Most often the maintenance needs were sediment and debris buildup which needs removed and/or significant erosion around or downstream of the outfall pipe which needs repaired to prevent further sediment loss into our streams and Lake Vermilion. Only 12 of the 54 inspected outfalls need little or no maintenance.

Copies of the reports are available upon request.

2 – Data Collected regarding SSOs and Green Infrastructure BMPs

The City of Danville experienced 15 sanitary sewer overflows during the reporting year.

No sanitary sewer cross connections were discovered this year.

Danville has created an inventory of stormwater infrastructure facilities. At the end of the reporting year, we have documented 68 wet and dry stormwater basins, 2 underground storage facilities, and 5 green infrastructure facilities in Danville. Of these, the City owns 9 of the basins, and 2 of the green infrastructure facilities.

D. FUTURE STORM WATER ACTIVITIES

Danville has several upcoming projects with some portion of stormwater management infrastructure improvements.

1) DHS Shared Use Path - This project will replace inlets and storm sewers to improve drainage along Jackson and Fairchild Streets, as well as constructing curb and gutter and a concrete shared use (bicycle/pedestrian) path. The project began in April 2017, and will be reported on next year's annual report

2) South Street Improvements

3) Voorhees Bridge Replacement

4) English-Jackson Intersection Improvements

5) Denmark – Old Ottawa Road Improvements

E. RELIANCE ON ANOTHER GOVERNMENT ENTITY

The City of Danville does not rely on another government entity to satisfy permit obligations.

F. CONSTRUCTION PROJECT LIST 2016-2017:

The following construction projects were undertaken or ongoing by the City of Danville between March 1, 2016 and February 28, 2017:

(1) DHS Shared Use Path - This project will replace inlets and storm sewers to improve drainage along Jackson and Fairchild Streets, as well as constructing curb and gutter and a concrete shared use (bicycle/pedestrian) path. The project began in April 2017, and will be reported on next year's annual report.

(2) Southview Sanitary Sewer Improvements

(3) Tuttle Street Sanitary Sewer Improvements

(4) Riverfront Clearing and Grading Improvements

(5) 2017 Sewers, miscellaneous storm/sanitary sewer replacements

(6) 2017 Infrastructure Improvements (Overlay, Sealcoat, Micro-surface at various street locations)

G. ATTACHMENTS A AND B:

“Attachment A – 2016-2017 NPDES Compliance Report” summarizes the BMP activities that were implemented for the compliance period March 1, 2016 through February 28, 2017. A status designation of “Completed” indicates that the activity fully meets the milestone proposed in the Notice of Intent. A status designation of “Substantially Completed” indicates that a majority of the activity has been completed, but still has some incomplete parts. A status of “Partially Completed” indicates that the activity was started, but at least 50% has yet to be finished. A status of “Incomplete – Forthcoming” indicates the activity has not been started, but we have plans to begin within the next reporting year. A status of “Incomplete” indicates the activity was incomplete at the end of the reporting year.

For Year 1 (2016-2017), the City of Danville has 38 BMPs outlined in the NOI. 15 of BMPs were completed, 4 were substantially completed, 11 were partially completed, 5 were incomplete but are scheduled to take place within the next year, and 3 were incomplete.

“Attachment B – Notice of Intent Proposed Measureable Goals and Milestones” includes a list of milestones established for the next permit period, Year 2 March 1, 2017 to February 28, 2018.

H. ADDITIONAL PROGRAM COMPLIANCE:

1. Stormwater Master Plan

In an effort to better understand the stormwater management needs and priorities therein, the City recently hired a private consultant to develop a Stormwater Master Plan for identifying stormwater needs throughout the City. This comprehensive study of the stormwater program needs developed a list of 40 stormwater and flood management projects ranging from improving drainage to assisting private homeowners. The Master Plan also lays out the personnel and fiscal requirements needed for stormwater maintenance and for meeting the NPDES permit requirements. The City Council approved the plan in April 2016. Due to the size of the report, it is not attached herein. However, it can be downloaded from the City of Danville’s Stormwater Management webpage: www.danville-stormwater.org.

2. Status of Compliance with the Monitoring and Assessment Program

Under Part V. Monitoring, Recordkeeping, and Reporting, the new permit requires the permittee to develop and implement a monitoring and assessment program to evaluate the effectiveness of the BMPs being implemented to reduce pollutant loading and water quality impacts. The program was required to be established within 180 days of the permit issuance date.

The City of Danville drafted their Monitoring Program during the summer of 2016. A visual monitoring program for the large outfalls (24” and larger) was established to best fulfill the requirements of the permit, while meeting the time and monetary constraints Danville is faced with. The program was tested during the fall of 2016 and fully implemented in November 2016.

An entirely new data collection system was established to implement this program. Outfall monitoring criteria were input into ArcGIS. Monitoring data and photos can be collected in the field utilizing an iPad. The reports are then downloaded and compiled once back in the office. A blank copy of the report forms can be found in Appendix F. A copy of the Standard Operating Procedure for the monitoring program can be found in Appendix G.

The original Monitoring plan and the first update can be found in Appendix C and D. Through trial and error of both in-field and in-office practices and protocols, the plan has been amended to better meet our program needs. The most up-to-date amended version of the plan can be found in Appendix E.

A summary of the inspection results can be found listed in Part C. Results of Information Collected and Analyzed.

This report hereby represents the City of Danville's stormwater management program, designed to reduce the discharge of pollutants from the MS4 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 and the Clean Water Act.

This report is respectfully submitted to the Illinois Environmental Protection Agency (IEPA) as the annual summary of Danville's efforts to fulfill the requirements of General NPDES Permit No. ILR400546.

If you have any questions about this report, please contact me at (217) 431-3441 or email me at cruhter@cityofdanville.org.

Sincerely,



Colleen K. Ruhter, P.E.
Stormwater Engineer
City of Danville



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, 2016 To March, 2017

Permit No. ILR40 00546

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

Name: City of Danville Mailing Address 1: 17 W. Main Street
Mailing Address 2: 1155 E. Voorhees Street, Suite A County: Vermilion
City: Danville State: IL Zip: 61832 Telephone: 217-431-2382
Contact Person: Colleen Ruhter Email Address: cruhter@cityofdanville.org
(Person responsible for Annual Report)

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

City of Danville

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 | <input checked="" type="checkbox"/> | 4. Construction Site Runoff Control | <input checked="" type="checkbox"/> |
| 2. Public Participation/Involvement | <input checked="" type="checkbox"/> | 5. Post-Construction Runoff Control | <input checked="" type="checkbox"/> |
| 3. Illicit Discharge Detection & Elimination | <input checked="" type="checkbox"/> | 6. Pollution Prevention/Good Housekeeping | <input checked="" type="checkbox"/> |

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:

Colleen K. Ruhter, P.E.
Printed Name:

5-30-2017
Date:

Stormwater Engineer
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



City of Danville

Storm Water Pollution Prevention Plan (SWPPP) Erosion & Sediment Control Inspection Report

Per the General Construction Permit ILR10, an erosion & sediment control inspection must be completed at least once each week, as well as by the end of the next business day after a rain event of 0.5 inches or greater. Maintenance and repair shall be conducted in accordance with the approved plans and SWPPP. Inspections are required until a Notice of Termination is filed with IEPA.

Project Name: _____ Inspection Date & Time: _____
 Project Number: _____ Name of Inspector(s): _____
 Contractor: _____ Type of Insp.: Weekly >0.5" precip. Precip amt _____ in.
 Subs: _____ IRL10 Permit Number: _____
 Current Construction Phase: Clearing Rough Grading Demolition
 Infrastructure Building Construction Final Grading Final Stabilization

Permit & Plans				
			Actions Required and Notes	Date Corrected
1	Are the NOI and Authorization Letter posted on site?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
2	Are the erosion & sediment control plans and SWPPP posted on site?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
3	Are all SWPPP weekly/post-rainfall inspection reports maintained onsite?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
4	Have all previously found deficiencies been corrected?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
REVIEW THE PLANS AND SWPPP EACH TIME BEFORE COMPLETING THIS INSPECTION REPORT				
5	Do site conditions meet the approved plans and SWPPP?*	<input type="checkbox"/> Yes <input type="checkbox"/> No		
6	Is the sequence of construction being followed?	<input type="checkbox"/> Yes <input type="checkbox"/> No		

If the answer to any of the items 1-6 above is "No", the contractor is hereby ordered to correct the deficiency. Repairs and stabilization are to be completed within 24 hours of this report.

Sediment Discharge				
			Actions Required and Notes	Date Corrected
7	Is there potential for sediment to leave the limits of the construction site?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
8	Is there evidence of significant sediment discharge to surface waters, storm sewers, or otherwise off site?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Significant sediment discharge may be indicated by (but not limited to) observation of the following:				
9	Turbid flows	<input type="checkbox"/> Yes <input type="checkbox"/> No		
10	Rills, rivulets, or channels caused by erosion	<input type="checkbox"/> Yes <input type="checkbox"/> No		
11	Sediment deposits in areas that drain to inlets, catch basins, or surface water	<input type="checkbox"/> Yes <input type="checkbox"/> No		
12	Sediment deposits or disturbed soil outside of permitted site area	<input type="checkbox"/> Yes <input type="checkbox"/> No		

If any of the items 7-12 above is "Yes", the contractor is hereby ordered to correct the deficiency. Repairs and stabilization are to be completed within 24 hours of this report. If any of the items 8-12 above is "Yes", the contractor must contact the IEPA within 24 hours and an Incidence of Non-Compliance (ION) must be mailed within 5 days (per ILR10 requirements).

*Plans and SWPPP may be modified as needed, provided the contractor indicates the reason for the change, changes are initialed and dated on the plans and SWPPP, and the City of Danville is notified via email (stormwater@cityofdanville.org). All controls put in place must prevent sediment from leaving the site.

The stormwater pollution prevention Best Management Practices (BMPs), as listed in the approved plans and SWPPP, shall be installed, inspected, and maintained as required to ensure they function as intended throughout the duration of construction. In general, BMPs are intended to prevent sediment from escaping the site. If sediment appears to be able to bypass, go through, or otherwise get around a BMP, perform maintenance as necessary to fully restore function.

BMPs					
		Installed?	Maint. Required?	Actions Required and Notes	Date Corrected
13	Construction entrance (clean gravel - free of mud, dirt, etc.) Any tracking is swept clean DAILY.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
14	Silt fence (trenched in; segments joined per details; fully upright; no tears, gaps, sediment build up, sediment on back side of fence, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
15	Inlet protection (in place, installed per plans, less than 25% full, fabric unobstructed)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
16	Natural resources protected (streams, mature trees, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
17	Sediment traps (no erosion, less than 10% full, stabilized properly)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
18	Stockpile protection (stabilization, silt fence, tarps, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
19	Berms, check dams and clear water diversions (installed per plans)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
20	Concrete washout (installed per plans with signs, properly maintained; washouts ONLY occur where permitted)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
21	Slope stabilization (all slopes adequately stabilized to prevent erosion)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
23	Trash removed daily	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
24	Fueling, storage and cleaning areas maintained (free of litter, leaks, etc. containers covered and secured)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
25	Non-stormwater (wash water, de-watering, etc.) is controlled in a manner which prevents erosion or sediment loss.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
26	Permanent stabilization (seed and straw or other method is in place, uniformly covered with no bare spots. Grass is at least 70% thick.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
27	Other: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

If maintenance is needed for any of the items 13-27 above, the contractor is hereby ordered to correct the deficiency. Repairs and stabilization are to be completed within 24 hours of this report.

Inspector's Signature: _____ Date/Time: _____

**DANVILLE SANITARY DISTRICT
ANALYTICAL REPORT**

**FOR:
CITY OF DANVILLE**

SAMPLE NUMBER BO441

PARAMETER	RESULT	UNIT	METHOD
BOD5		MG/L	SM 5210B
COD	43		
TOTAL SUSPENDED SOLIDS	8	MG/L	SM 2540D
AMMONIA	0.63	MG/L	SM 4500-NH ₃ D
PHOSPHORUS	0.01	MG/L	HACH METHOD 8190
SULFATE	166	MG/L	SM 4500-SO ₄ 2-E
ALKALINITY	237	MG/L	SM23208B
PH	8.4	LOG	SM 4500H+B

SAMPLE DATE: 1/23/2017

ANALYST: DANICA HAYES

**ALL SAMPLES ARE COLLECTED, HANDLED, PREPARED AND
ANALYZED IN ACCORDANCE WITH USEPA 40 CFR PART 136 AS AMENDED.**

DANVILLE SANITARY DISTRICT ANALYTICAL REPORT

FOR:
CITY OF DANVILLE

SAMPLE NUMBER BO442

PARAMETER	RESULT	UNIT	METHOD
BOD5		MG/L	SM 5210B
COD	49		
TOTAL SUSPENDED SOLIDS	11	MG/L	SM 2540D
AMMONIA	1.43	MG/L	SM 4500-NH ₃ D
PHOSPHORUS	0.03	MG/L	HACH METHOD 8190
SULFATE	92	MG/L	SM 4500-SO ₄ 2-E
ALKALINITY	275	MG/L	SM23208B
PH	7.9	LOG	SM 4500H+B

SAMPLE DATE: 1/23/2017

ANALYST: DANICA HAYES

ALL SAMPLES ARE COLLECTED, HANDLED, PREPARED AND
ANALYZED IN ACCORDANCE WITH USEPA 40 CFR PART 136 AS AMENDED.

ATTACHMENT A - 2016-2017 NPDES COMPLIANCE REPORT - CITY OF DANVILLE, ILLINOIS



BMP ID	STATUS	BMP CATEGORY	BMP SUBCATEGORY	BMP DESCRIPTION	MEASUREABLE GOAL	YEAR 1 MILESTONE	MILESTONE YEAR 1 ACTIVITIES
A.1	SUBSTANTIALLY COMPLETED	Public Education and Outreach	Distributed Paper Material	Distribute stormwater runoff awareness brochure to local agencies and public buildings. Investigate other potential material distribution ideas that can promote BMP's. Update website to include stormwater runoff and pollution prevention materials.	Update website regularly, at least quarterly. Track webpage hits. See an increase in visitors to page.	Overhaul www.danville-stormwater.org webpage. Track hits to website monthly. Update information quarterly, or as needed.	Website was substantially overhauled. New pages include pollution prevention ideas, "green" BMPs, erosion control information, and an easily accessible means of reporting problems. Hits to website have gone up since September 2016.
A.2	COMPLETED	Public Education and Outreach	Speaking Engagement	Promote and make available speaking engagements about storm water pollution and best management practices upon request of citizens or public organizations.	Participate in at least one speaking engagement annually. Contact the middle school(s) each fall to gage interest. Include information on the website about our availability for public speaking. Consider contacting HOAs, as well.	Have staff available for speaking engagements about stormwater pollution and best management practices when requested. Post information on the website about staff availability for speaking engagements.	The City Engineering staff continues to incorporated stormwater best management practices into discussion during public meetings and project planning. 2 presentations on the Stormwater Master Plan were given, as well as one on the fiscal needs of the NPDES program.
A.6	PARTIALLY COMPLETED	Public Education and Outreach	Other Public Education	Improve communications between residential and commercial activities adjacent to projects to keep both residences and business owners informed on a construction project progress. Publicize project information via City web site and provide staff phone lines for residents to report problems.	Update the stormwater website with information regarding current City of Danville construction projects. Update as needed, at least quarterly, to maintain accurate information. Follow up on any citizen concerns received via the "report a problem" form.	Establish guidelines for all staff to communicate project information and follow up procedures. Provide an easy-to-find and easy-to-use link on the website for reporting project, pollution, and other concerns.	The Sustainability section of the website includes past and recent projects, ways to help installing BMPs, and available Sustainable publications.
B.2	PARTIALLY COMPLETED	Public Participation/ Involvement	Educational Volunteer	Have staff personnel volunteer and available to speak to groups, businesses, and owners on storm water pollution and best management practices when opportunities arise.	Participate in at least one speaking engagement annually. Contact the middle school(s) each fall to gage interest. Include information on the website about our availability for public speaking. Consider contacting HOAs, as well.	Have staff available for speaking engagements about stormwater pollution and best management practices when requested. Post information on the website about staff availability for speaking engagements.	The City Engineering staff continues to incorporated stormwater best management practices into discussion during public meetings and project planning. 2 presentations on the Stormwater Master Plan were given, as well as one on the fiscal needs of the NPDES program.
B.3	COMPLETED	Public Participation/ Involvement	Stakeholder Meeting	Provide a minimum of one public meeting annually for the public to provide input as to the adequacy of the permittee's MS4 program.	Establish the February Public Works Committee Meeting (held the second Tuesday of each month) to be our annual MS4 program evaluation meeting.	Post a notice on the City's homepage and stormwater management webpages advertising the meeting. Collect, evaluate, and consider any citizen concerns raised at the meeting.	City hosted a public meeting during the February Public Works Committee Meeting, with an open forum for NPDES comments. No public comments were received.
B.5	COMPLETED	Public Participation/ Involvement	Volunteer Monitoring	Review and update as needed the current web-based system for reporting problems on storm water pollution issues. Review the City's response plan.	Public awareness, involvement, concerns, and reporting activity on illegal discharges, dumping, and soil erosion with all City activities.	Update the web based system for public to report problems about storm water issues. Create a prominent link to "Report flooding, erosion, pollution, or illegal dumping". Review City response plan.	The City has recently updated the web-based system for reporting problems on stormwater pollution issues. Prominently displayed on the stormwater webpage, www.danville-stormwater.org, is a form for citizens to "Report flooding, erosion, pollution, or illegal dumping". We also accept phone calls from citizens with the same concerns. The completed forms are automatically emailed to the City Engineer, Assistant City Engineer, and the Stormwater Engineer. Similar forms are also available on all other City webpages: Engineering and Urban Services, Public Works, and City of Danville homepage.
B.6	INCOMPLETE	Public Participation/ Involvement	Program Involvement	Identify environmental justice areas and include appropriate public involvement/participation	Pursue identifying the environmental justice areas within the City of Danville. Engage with the aldermen of the ward(s) identified and explore various ways to include appropriate involvement with their citizen group(s).	Pursue identifying the environmental justice areas within the City of Danville.	The City of Danville has not pursued this BMP yet.
B.7	SUBSTANTIALLY COMPLETED	Public Participation/ Involvement	Other Public Involvement	Encourage storm drain stenciling and stream cleanup programs to the public by providing web based information about public volunteer opportunities about storm inlet stenciling. Provide information on equipment use. Provide at least one community cleanup day per year. Coordinate with other agencies such as Keep Vermilion County Beautiful.	Post information about how citizens can go about a storm drain stenciling effort. Update as needed. Track any stenciling reported by citizens. Coordinate efforts annually for community cleanup day(s).	Update informational section of the website to encourage storm inlet stenciling and community cleanup opportunities for public volunteers.	The City updated the stormwater website to include information and links to the Prairie Rivers Network in Champaign, which provides storm drain stenciling kits for free. The Public Works Department during current City street projects that require repair or new structures, replace inlet castings when available, with castings having the logo "Dump No Waste - Drains to River" . During the current year no inlets were stenciled.

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C.1	PARTIALLY COMPLETED	Illicit Discharge Detection & Elimination	Storm Sewer Map Preparation	Continue mapping program and televising of storm and sanitary sewers. Incorporate a data inventory for detection of illicit discharges.	Update mapping system with collected data. Track length and locations of sewers televised annually.	Collect and update data to map inventory and continue televising sewers.	Staff members continue to gather GPS coordinates and structure information of storm and sanitary structures within the City. The information has been added to current GIS maps. City sewer staff continues televising sewers and document cross connections to engineering staff. We added 4 miles of pipes to the GIS, and updated an additional 3 miles of pipes.
C.2	COMPLETED	Illicit Discharge Detection & Elimination	Regulatory Control Program	Identify, respond and eliminate illicit discharges of substances on streets, sidewalks and within sewers.	Enforce City ordinances 93.04, 93.05 and 93.06 pertaining to placing or depositing substances on streets, sidewalks and other public places. Have the Regulatory Compliance officer inspect and monitor reported violations.	Respond to illicit discharge and illegal dumping reports and enforce ordinance.	The City responds to all potential illicit discharges and illegal dumping that are reported or observed by City personnel. There were 93 code enforcement cases filed for illegal dumping this reporting year. 25 sites were cleaned up by the City of Danville.
C.3	PARTIALLY COMPLETED	Illicit Discharge Detection & Elimination	Detection/ Elimination/ Prioritization Plan	Evaluate sewer mapping and televised sewers for cross connections and/or direct discharges to streams and ditches.	Prioritize areas for inspections as they are reported or discovered. Develop program to eliminate cross connection or repair lines and manholes.	Conduct inventory and investigations, and prioritize sites. Continue reviewing mapping and video of sewers for elimination of cross connections and broken sewer lines.	The Street and Sewer Department continues to monitor for sewer cross connections for detection and evaluation as part of ongoing televising. The department continues to perform testing through normal maintenance and documentation of sewer lines. No cross connections occurred this year.
C.4	COMPLETED	Illicit Discharge Detection & Elimination	Illicit Discharge Tracing Procedures	Testing visual and/or laboratory testing of discharges identified during observed or public reported events.	Tests being performed by visual inspection or samples taken for laboratory testing of alleged illicit discharges at the site. If illicit discharges are found, a corrective action is developed.	Record the number of illicit connections found, repaired/replaced during observed or reported events.	Visual testing was conducted during all but one suspected illicit discharges to determine the extent and reported to the Plumbing Inspector & Engineering department. One suspected illicit discharge was taken for laboratory sampling. Results came back negative for any obvious pollutants.
C.5	COMPLETED	Illicit Discharge Detection & Elimination	Illicit Source Removal Procedures	Develop plan of action for elimination of illicit discharges upon their discovery.	A standard practice plan of procedures for remediating illicit discharges upon their discovery, notification, and documentation.	Use of notification and removal procedures.	City sewer crews and the engineering department worked with the City plumbing inspector to ensure issues had been addressed. A standard of practice plan of procedures for remediating illicit discharge and SSO's has been developed. 15 SSOs occurred this year.
C.7	PARTIALLY COMPLETED	Illicit Discharge Detection & Elimination	Visual Dry Weather Screening	Perform Dry weather outfall screening as part of the Outfall Monitoring Program.	Survey and inspect outfall locations, record and develop a recording schedule during dry weather. Begin detection/elimination program of any areas of concern. Monitor and record outfall conditions for needed repairs.	Inspect ourfall inventory for Year 2 during dry weather. Begin detection/elimination of any areas of concern.	Develop Outfall Monitoring Program within 180 days of permit. Inventory all known "priority" outfalls. Begin outfall monitoring during dry (and wet weather for Program requirements). Report any emergency concerns to Operations for maintenance/investigation needs. Report major and minor concerns for maintenance prioritization in the future.
D.1	PARTIALLY COMPLETED	Construction Site Runoff Control	Regulatory Control Program	Develop a new erosion control and sediment control ordinance to address construction site runoff control for all construction project.	Adoption of a City erosion and sediment control ordinance. Develop a checkoff list based on construction size and complexity of project for all new projects.	Develop draft ordinance in coordination with a consulting engineer. Utilize Erosion Control ordinance information from nearby and similar-sized jurisdictions throughout Illinois. Work with a group of stakeholders from within the community for outside input.	Draft ordinance progressed throughout the year. Consultant and stakeholders were involved throughout the process.
D.2	INCOMPLETE - FORTHCOMING	Construction Site Runoff Control	Erosion and Sediment Control BMPs	As part of developing an ordinance for erosion and sediment control, ensure best management practices are followed by distributing a manual for erosion/sediment control.	Distribute and update BMP Standard Practice Manual for public access at public buildings and on the City's web site.	Begin to develop BMP Standard Practice Manual in line with the erosion and sediment control ordinance.	Manual has not been developed to date.
D.4	COMPLETED	Construction Site Runoff Control	Site Plan Review Procedures	Review erosion control plans/practices submitted for each new site project, to meet the new Erosion Control Ordinance requirements.	Complete review of each soil erosion and sediment control plan on an as needed basis and follow up with field inspection(s) during construction to enforce owner/permittee inspection and maintenance requirements.	Review each project submitted and document inspections.	All land disturbance permits are reviewed for sediment and erosion control plans. Periodic site inspections are performed to verify plans are being followed.

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D.5	COMPLETED	Construction Site Runoff Control	Public Information Handling Procedures	Publicize and update as needed the existing on line contact information for reporting soil erosion/sediment non-compliance issues.	Investigate complaints and take appropriate actions.	Update the web based system for public to report problems about storm water issues. Create a prominent link to "Report flooding, erosion, pollution, or illegal dumping". Review City response plan.	The City of Danville will continue to monitor any issues reported via the online forms. During this reporting year, only one concern was reported, which was an issue with flooding on private property. No erosion control issues were reported by the public.
D.6	PARTIALLY COMPLETED	Construction Site Runoff Control	Site Inspection/ Enforcement Procedures	Conduct construction site inspections as a means to "spot-check" owners/contractors/permittees to ensure they are fulfilling their permit requirements for regular inspections and maintenance. Document and track inspections.	Conduct construction site inspections as a means to "spot-check" owners/contractors/permittees to ensure they are fulfilling their permit requirements for regular inspections and maintenance. Document and track inspections.	Inspect all site construction sites at least once during the project to verify owners/contractors/permittee are fulfilling their permit requirements. Perform close-out inspections to authorize permit closeout / occupancy authorizations at the end of a project to ensure site is fully stabilized before permit is closed. Document and track inspections.	Inspect sites with ILR10 permits at least once during construction, and at permit close-out. Verify site conditions meet permit, and the permittee is meeting the permit requirements for inspections and maintenance of erosion control. Document and track inspections. 14 sites in Danville had ILR10 permits during the reporting year. 9 of the sites were inspected by City personnel at least once.
E.1.1	INCOMPLETE	Post-Construction Runoff Control	Community Control Strategy	Within 3 years of this permit (NLT Mar 1, 2019), develop and implement a process to assess the water quality impacts in the design of all new and existing flood management projects that discharge to the MS4.	The City of Danville will need to develop this process within the next 2 years to meet the permit requirements	Investigate a process to assess water quality impacts in flood management projects.	Process has not been developed to date.
E.1.2	INCOMPLETE	Post-Construction Runoff Control	Community Control Strategy	Develop and implement a program to minimize the volume of stormwater runoff and pollutants from public surfaces through i. Annual training for all MS4 employees who manage or are directly involved in routine maintenance, repair, or replacement of public surfaces in green infrastructure. ii. Annual training for all contractors retained to manage or carry out routine maintenance, repair or replacement of public surfaces in green infrastructure or LID techniques.	Find or develop an appropriate training program to facilitate the construction of LID facilities.	Find or develop an appropriate training program to facilitate the construction of LID facilities.	Taining has not been implemented to date.
E.2.1	SUBSTANTIALLY COMPLETED	Post-Construction Runoff Control	Regulatory Control Program	Use of a formal checklist as a guide for final approval of construction site work.	Final inspection checklist being used as documentation of providing final approval of all construction sites and issuing corrective actions if applicable.	Create a formal Erosion Control checklist. Inspect construction site for erosion and sediment control issues during final inspections.	Formal checklist is completed, and included as Attachment H. Inspect construction site for erosion and sediment control issues during final inspections.
E.2.2	COMPLETED	Post-Construction Runoff Control	Regulatory Control Program	Require all regulated construction sites to have post-construction management plans that meet or exceed the requirements of ILR10.	All construction sites of 1.0 acres or more are required to receive an ILR10 permit issued by the Illinois EPA per the current and new revision of the stormwater ordinance.	Require all Construction sites of 1.0 acres or more to receive an ILR10 permit.	All land disturbance permits are reviewed for IRL10 permit requirements. 10 ILR10 permits were issued during the reporting year.
E.2.3	INCOMPLETE - FORTHCOMING	Post-Construction Runoff Control	Regulatory Control Program	Require long-term operation and maintenance plans for all new stormwater management facilities.	Require long-term operation and maintenance plans for all new stormwater management facilities.	Include operations and maintenance plan requirements in draft stormwater ordinance.	Include operations and maintenance plan requirements in draft stormwater ordinance.
E.2.4	INCOMPLETE - FORTHCOMING	Post-Construction Runoff Control	Regulatory Control Program	Develop, implement and enforce a program to address and minimize the volume and pollutant load of stormwater runoff from projects from new development and redevelopment, adopting strategies that incorporate the infiltration, reuse and evapotranspiration of stormwater into the project to the maximum extent practicable.	Require both water quantity and water quality control for development projects.	Include water quality and water quantity requirements in draft stormwater ordinance, including use of green infrastructure strategies.	We have Included water quality and water quantity requirements in draft stormwater ordinance, including use of green infrastructure strategies.
E.4	INCOMPLETE - FORTHCOMING	Post-Construction Runoff Control	Pre-Construction Review of BMP Designs	Perform site plan reviews for stormwater BMPs to ensure water quality and water quantity control, as well as constructability and long-term operation and maintenance.	During permitting process ensure conformance with ordinances regulating water quality and water quantity control.	Develop amended stormwater ordinance to include both water quantity and water quality control requirements.	Plans as submitted have been reviewed to ensure current stormwater ordinance is being met (water quantity control).

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BMP ID	STATUS	BMP CATEGORY	BMP SUBCATEGORY	BMP DESCRIPTION	MEASUREABLE GOAL	YEAR 1 MILESTONE	MILESTONE YEAR 1 ACTIVITIES
E.5	PARTIALLY COMPLETED	Post-Construction Runoff Control	Site Inspections During Construction	Require owners / permittees to perform regular site inspections during the life of a construction project. Provide a formal checklist for large (1 ac+) permitted sites to fulfill erosion control requirements for weekly and after-rain inspections. A pre-construction meeting shall be set up for all large construction activities to review SWPPP's and discuss erosion and sediment control procedures.	Upon enactment of the new erosion control ordinance, all permittees will be required to perform regular site inspections and subsequent maintenance, to meet the requirements of Part IV.B.4.a.vii, as well as Parts IV.B.4.a.i and .iv of the MS4 permit.	Perform random enforcement "spot check" inspections, to verify permittees are fulfilling their inspection and maintenance requirements.	Current inspections by City personnel occur on occasion to enforce ILR10 requirements.
E.6.1	COMPLETED	Post-Construction Runoff Control	Post-Construction Inspections	Inspect each permitted construction site during final inspection for conformance with the project specific BMPs as part of the building inspection process. Perform site inspections when issues are reported by the public.	Inspect each permitted construction site during final inspection for conformance with the project specific BMP's as part of the building inspection process. Perform site inspections when issues are reported by the public.	Inspect permitted post-construction sites. Respond to reported public issues.	5 permitted sites were closed out during the reporting year. 4 of sites were visited by City personnel at least once during construction.
E.6.2	PARTIALLY COMPLETED	Post-Construction Runoff Control	Post-Construction Inspections	Perform maintenance inspections of all City-owned water quality and water quantity stormwater facilities at least once every 3 years. Perform maintenance inspections or request maintenance inspection records of all privately owned water quality and water quantity stormwater facilities at least once every 3 years.	Create an inventory of all stormwater facilities and stormwater quality facilities in the City. Begin inspections of stormwater facilities.	Create an inventory of all stormwater facilities and stormwater quality facilities in the City. Begin inspections of stormwater facilities, and collection of requested maintenance documents. Facilities should be inspected every 3 years.	Inventory of stormwater ponds was created. Inventory of green infrastructure / water quality facilities was created. There are about 70 ponds and 5 water quality facilities in Danville. 2 ponds were inspected this year.
E.7	PARTIALLY COMPLETED	Post-Construction Runoff Control	Other Post-Construction Runoff Controls	Develop and implement a program to minimize the volume of stormwater runoff and pollutants from existing privately owned developed property.	Implement the 8 different categories required per ILR40 Part IV.B.5.e	Implement the 8 different categories required per ILR40 Part IV.B.5.e	i. not yet addressed. ii.a partially complete ii.b complete ii.c not yet addressed. ii.d. complete ii.e complete ii.f complete ii.g complete. See report sheet for further details.
F.1	COMPLETED	Pollution Prevention/Good Housekeeping	Employee Training Program	Provide training for employees for storm water quality issues or that have routine contact with chemical substances, pesticides and herbicide applications, salt and calcium applications, or abatement and containment of hazardous material spills.	Conduct applicable training annually and for all new employees. Part IV.B.6.a-d Provide RainCheck training video for all public works field crew personnel.	Provide applicable annual training for Public Works personnel.	RainCheck Stormwater Pollution Prevention for MS4s training video was provided to Public Works personnel. We trained 23 operations crew members and managers in November 2016.
F.2.1	PARTIALLY COMPLETED	Pollution Prevention/Good Housekeeping	Inspection and Maintenance Program	Document City's annual storm water maintenance program.	Provide routine maintenance to all public storm water infrastructure as needed and per maintenance schedule. Document maintenance activities.	Document City's annual storm water maintenance program within the annual report.	The Street and Sewer Department cleaned/repaired storm sewer lines and various catch basins as part of the city's maintenance program, on an emergency basis. routine/preventive stormwater system maintenance is not performed. Call out logs document work that has been performed. Per operations records there was approximately 6000 lineal feet of storm sewer lines cleaned during this reporting cycle. 5000 LF were televised. 33 miles of ditchlines were mowed. 1140 inlets were cleared at the surface/grate. 70 LF of pipes were removed/replaced.
F.2.2	SUBSTANTIALLY COMPLETED	Pollution Prevention/Good Housekeeping	Inspection and Maintenance Program	Prepare Storm Water Pollution Prevention Plan (SWPPP) for all applicable municipal facilities.	Provide SWPPP for each facility and conduct an annual inspection report.	Update the SWPPP for Public Works; perform SWPPP inspection. Create SWPPP for South Street; perform SWPPP inspection.	Public Works SWPPP was updated. Inspection was completed. 59 items of concern were found. South Street SWPPP was drafted. Inspection was completed. 19 items of concern were found.
F.4.1	COMPLETED	Pollution Prevention/Good Housekeeping	Municipal Operations Waste Disposal	Maintain garbage and yard waste collection.	Garbage and yard waste collection is provided on a weekly basis to keep waste out of storm sewer systems.	Continue garbage and yard waste collection methods.	The yard waste collection system had weekly collections designated by zones within the City. The yard waste program collected 420 tons of grass, 252 tons of leaves and 346 tons of brush through totes or waste bags during the 2016 calendar year. Collected materials are composted at the City's designated yard waste facility.

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F.4.2	INCOMPLETE - FORTHCOMING	Pollution Prevention/Good Housekeeping	Municipal Operations Waste Disposal	Control vehicle and equipment washing by performing all washes in an enclosed washing bay which drains to sanitary sewer.	Wash public works vehicles and equipment as needed in an enclosed bay.	Wash public works vehicles and equipment as needed in an enclosed bay.	The City is working towards a plan to enclosed a designated bay system for washing all large public works vehicles to ensure the runoff is contained. Currently all vehicles are washed on an asphalt and gravel parking lot which drains directly to the storm sewer system. Approximately 16 vehicles per month are washed, using 320 gallons of water and 5 gallons of Grrr Heavy Duty Cleaner.
F.4.3	COMPLETED	Pollution Prevention/Good Housekeeping	Municipal Operations Waste Disposal	Oil and fluid disposal program to dispose of oils and fuels by a licensed waste hauler.	Dispose of oil and used oil filters every other month. Dispose of other fluids as needed (approximately every 6 months)	Dispose of oil and used oil filters every other month. Dispose of other fluids as needed (approximately every 6 months)	Disposal of oil, oil filters, and other fluids were disposed of by way of a licensed waste hauler throughout the year to ensure no waste was contaminating storm water discharges. 600 gallons of oil and 200 used oil filters were collected this year.
F.4.4	COMPLETED	Pollution Prevention/Good Housekeeping	Municipal Operations Waste Disposal	Maintain a proper disposal area for all vactor truck disposal materials from both sanitary and storm sewer systems. All liquids shall be discharged to the sanitary sewer system and all dry materials collected and disposed of as solid waste.	Dispose of all vactor truck materials at the proper disposal area.	Ensure all vactor trucks are using the facility. This includes all trucks which have collected stormwater, not just sanitary sewer collections.	Enact changes to ensure all storm and sanitary vactor truck collections are discharged to the collection facility. Approximately 365 truckloads of sanitary waste and 1095 truckloads of storm sewer waste are collected each year. Each truckload is 2100 gallons.
F.6	COMPLETED	Pollution Prevention/Good Housekeeping	Other Municipal Operations Controls	Sweep all streets in the City at least once before September and twice between September and November.	Reducing storm sewer clogging at inlets and piping. Increase the street sweeping frequency as needed.	Sweep all streets in the City at least once before September and twice between September and November. Track lane-miles swept and volume of debris collected.	The street sweeping program was in effect during the spring and fall months. The City collected approximately 3660 cubic yards of leaves and debris from city streets. A total of 3687 lane-miles were swept, averaging 230 per month during the 10 months excluding October and November. With 674 and 718 lane-miles swept during these two months. Each outside lane of curbed roadway was swept about 4 times during the year, with each sweeping session comprised of two passes of the sweeper.

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BMP ID	BMP CATEGORY	BMP SUBCATEGORY	BMP DESCRIPTION	MEASUREABLE GOAL	YEAR 2 MILESTONE
A.1	Public Education and Outreach	Distributed Paper Material	Distribute stormwater runoff awareness brochure to local agencies and public buildings. Investigate other potential material distribution ideas that can promote BMP's. Update website to include stormwater runoff and pollution prevention materials.	Update website regularly, at least quarterly. Track webpage hits. See an increase in visitors to page.	Continue regularly updating and tracking website. Create a handout referencing/advertising the website for distribution at Public Works and City Hall.
A.2	Public Education and Outreach	Speaking Engagement	Promote and make available speaking engagements about storm water pollution and best management practices upon request of citizens or public organizations.	Proactively contact schools regarding speaking opportunities. Have staff available for speaking engagements about storm water pollution and best management practices when requested. Plan to participate in at least 1 event per year.	Have staff available for speaking engagements about storm water pollution and best management practices when requested. Plan to participate in at least 1 event per year.
A.6	Public Education and Outreach	Other Public Education	Improve communications between residential and commercial activities adjacent to projects to keep both residences and business owners informed on a construction project progress. Publicize project information via City web site and provide staff phone lines for residents to report problems.	Update the stormwater website with information regarding current City of Danville construction projects. Update as needed, at least quarterly, to maintain accurate information. Follow up on any citizen concerns received via the "report a problem" form.	Create and update regularly (at least quarterly), a map of current and proposed City of Danville construction projects, along with a brief description of each and anticipated construction timeframe. Maintain link and follow-up on reported concerns.
B.2	Public Participation/Involvement	Educational Volunteer	Promote and make available speaking engagements about storm water pollution and best management practices upon request of citizens or public organizations.	Proactively contact schools regarding speaking opportunities. Have staff available for speaking engagements about storm water pollution and best management practices when requested. Plan to participate in at least 1 event per year.	Have staff available for speaking engagements about storm water pollution and best management practices when requested. Plan to participate in at least 1 event per year.
B.3	Public Participation/Involvement	Stakeholder meeting	Provide a minimum of one public meeting annually for the public to provide input as to the adequacy of the permittee's MS4 program.	Establish the February Public Works Committee Meeting (held the second Tuesday of each month) to be our annual MS4 program evaluation meeting.	Post a notice on the City's homepage and stormwater management webpages advertising the meeting. Collect, evaluate, and consider any citizen concerns raised at the meeting.
B.5	Public Participation/Involvement	Volunteer Monitoring	Review and update as needed the current web-based system for reporting problems on storm water pollution issues. Review the City's response plan.	Public awareness, involvement, concerns, and reporting activity on illegal discharges, dumping, and soil erosion with all City activities.	Continue to use and refine the web based reporting system on storm water management.
B.6	Public Participation/Involvement	Program Involvement	Identify environmental justice areas and include appropriate public involvement/participation	Pursue identifying the environmental justice areas within the City of Danville. Engage with the aldermen of the ward(s) identified and explore various ways to include appropriate involvement with their citizen group(s).	Pursue identifying the environmental justice areas within the City of Danville. Engage with the aldermen of the ward(s) identified and explore various ways to include appropriate involvement with their citizen group(s).

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BMP ID	BMP CATEGORY	BMP SUBCATEGORY	BMP DESCRIPTION	MEASUREABLE GOAL	YEAR 2 MILESTONE
B.7	Public Participation/ Involvement	Other Public Involvement	Encourage storm drain stenciling and stream cleanup programs to the public by providing web based information about public volunteer opportunities about storm inlet stenciling. Provide information on equipment use. Provide at least one community cleanup day per year. Coordinate with other agencies such as Keep Vermilion County Beautiful.	Post information about how citizens can go about a storm drain stenciling effort. Update as needed. Track any stenciling reported by citizens. Coordinate efforts annually for community cleanup day(s).	Provide assistance and monitor stenciling and community cleanup programs.
C.1	Illicit Discharge Detection & Elimination	Storm Sewer Map Preparation	Continue mapping program and televising of storm and sanitary sewers. Incorporate a data inventory for detection of illicit discharges.	Update mapping system with collected data. Track length and locations of sewers televised annually.	Collect and update data to map inventory and continue televising sewers.
C.2	Illicit Discharge Detection & Elimination	Regulatory Control Program	Identify, respond and eliminate illicit discharges of substances on streets, sidewalks and within sewers.	Enforce City ordinances 93.04, 93.05 and 93.06 pertaining to placing or depositing substances on streets, sidewalks and other public places. Have the Regulatory Compliance officer inspect and monitor reported violations.	Respond to illicit discharge and illegal dumping reports and enforce ordinance.
C.3	Illicit Discharge Detection & Elimination	Detection/ Elimination Prioritization Plan	Evaluate sewer mapping and televised sewers for cross connections and/or direct discharges to streams and ditches.	Prioritize areas for inspections as they are reported or discovered. Develop program to eliminate cross connection or repair lines and manholes.	Inventory conducted and sites prioritized. Continue reviewing mapping and video of sewers for elimination of cross connections and broken sewer lines.
C.4	Illicit Discharge Detection & Elimination	Illicit Discharge Tracing Procedures	Testing visual and/or laboratory testing of discharges identified during observed or public reported events.	Tests being performed by visual inspection or samples taken for laboratory testing of alleged illicit discharges at the site. If illicit discharges are found, a corrective action is developed.	Record the number of illicit connections found, repaired/replaced during observed or reported events.
C.5	Illicit Discharge Detection & Elimination	Illicit Source Removal Procedures	Develop plan of action for elimination of illicit discharges upon their discovery.	A standard practice plan of procedures for remediating illicit discharges upon their discovery, notification, and documentation.	Review plan and modify as necessary. Use of notification and removal procedures.
C.7	Illicit Discharge Detection & Elimination	Visual Dry Weather Screening	Perform Dry weather outfall screening as part of the Outfall Monitoring Program.	Survey and inspect outfall locations, record and develop a recording schedule during dry weather. Begin detection/elimination program of any areas of concern. Monitor and record outfall conditions for needed repairs.	Continue outfall inspections as part of Outfall Monitoring Program . Continue emergency maintenance work. Add or eliminate outfalls to priority list, as appropriate. Danville's goal is to inspect all priority outfalls once during dry weather and once during wet weather each year.
D.1	Construction Site Runoff Control	Regulatory Control Program	Develop a new erosion control and sediment control ordinance to address construction site runoff control for all construction project.	Adoption of a City erosion and sediment control ordinance. Develop a checkoff list based on construction size and complexity of project for all new projects.	Take the final ordinance to City Council for approval and enactment (May 2017). Begin enforcement of new permit requirements, plan and development review requirements, site inspection requirements and site closeout requirements once the ordinance becomes effective.

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BMP ID	BMP CATEGORY	BMP SUBCATEGORY	BMP DESCRIPTION	MEASUREABLE GOAL	YEAR 2 MILESTONE
D.2	Construction Site Runoff Control	Erosion and Sediment Control BMPs	As part of developing an ordinance for erosion and sediment control, ensure best management practices are followed by distributing a manual for erosion/sediment control.	Finalize BMP Standard Practice Manual. Distribute and/or post online as appropriate. Distribute along with erosion control permit applications.	Obtain Erosion Control Manual details from City of Urbana for use as a draft document for use in Danville. Edit as necessary and incorporate into an official manual for distribution in Danville.
D.4	Construction Site Runoff Control	Site Plan Review Procedures	Review erosion control plans/practices submitted for each new site project, to meet the new Erosion Control Ordinance requirements.	Complete review of each soil erosion and sediment control plan on an as needed basis and follow up with field inspection(s) during construction to enforce owner/permittee inspection and maintenance requirements.	Review each project submitted and document inspections. Track all erosion control permits, submittals, and inspections related to each permit under the new erosion control ordinance.
D.5	Construction Site Runoff Control	Public Information Handling Procedures	Publicize and update as needed the existing on line contact information for reporting soil erosion/sediment non-compliance issues.	Continue to use and refine the web based reporting system on storm water management. Investigate complaints and take appropriate actions.	Continue to use and refine the web based reporting system on storm water management. Investigate complaints and take appropriate actions.
D.6	Construction Site Runoff Control	Site Inspection/ Enforcement Procedures	Conduct construction site inspections as a means to "spot-check" owners/contractors/permittees to ensure they are fulfilling their permit requirements for regular inspections and maintenance. Document and track inspections.	Conduct construction site inspections as a means to "spot-check" owners/ contractors/ permittees to ensure they are fulfilling their permit requirements for regular inspections and maintenance. Document and track inspections.	Inspect sites with ILR10 permits at least once during construction and at permit close-out. Inspect Class 1 and Class 2 sites under the new erosion control ordinance as required by ordinance. Verify site conditions meet permit, and the permittee is meeting the permit requirements for inspections and maintenance of erosion control. Document and track inspections.
E.1.1	Post-Construction Runoff Control	Community Control Strategy	Within 3 years of this permit (NLT Mar 1, 2019), develop and implement a process to assess the water quality impacts in the design of all new and existing flood management projects that discharge to the MS4.	Investigate a process to assess water quality impacts in flood management projects.	Investigate a process to assess water quality impacts in flood management projects.
E.1.2	Post-Construction Runoff Control	Community Control Strategy	Develop and implement a program to minimize the volume of stormwater runoff and pollutants from public surfaces through i. Annual training for all MS4 employees who manage or are directly involved in routine maintenance, repair, or replacement of public surfaces in green infrastructure. ii. Annual training for all contractors retained to manage or carry out routine maintenance, repair or replacement of public surfaces in green infrastructure or LID techniques.	Find or develop an appropriate training program to facilitate the construction of LID facilities.	Find or create an appropriate training module before the end of the reporting year.
E.2.1	Post-Construction Runoff Control	Regulatory Control Program	Use of a formal checklist as a guide for final approval of construction site work.	Inspect construction site for erosion and sediment control issues during final inspections.	Inspect construction site for erosion and sediment control issues during final inspections. Begin use of new construction site inspection checklist as part of close-out processes. Track permit inspections and close-out dates.

ATTACHMENT B - 2016-2017 NPDES STORMWATER ACTIVITY REPORT - CITY OF DANVILLE, ILLINOIS



BMP ID	BMP CATEGORY	BMP SUBCATEGORY	BMP DESCRIPTION	MEASUREABLE GOAL	YEAR 2 MILESTONE
E.2.2	Post-Construction Runoff Control	Regulatory Control Program	Require all regulated construction sites to have post-construction management plans that meet or exceed the requirements of ILR10.	All construction sites of 1.0 acres or more are required to receive an ILR10 permit issued by the Illinois EPA per the current and new revision of the stormwater ordinance.	All land disturbance permits are reviewed for IRL10 permit requirements.
E.2.3	Post-Construction Runoff Control	Regulatory Control Program	Require long-term operation and maintenance plans for all new stormwater management facilities.	Include operations and maintenance plan requirements in stormwater ordinance.	Enforce O&M plan requirements as part of new stormwater management ordinance. Track O&M plans.
E.2.4	Post-Construction Runoff Control	Regulatory Control Program	Develop, implement and enforce a program to address and minimize the volume and pollutant load of stormwater runoff from projects from new development and redevelopment, adopting strategies that incorporate the infiltration, reuse and evapotranspiration of stormwater into the project to the maximum extent practicable.	Require both water quantity and water quality control for development projects.	Enforce water quantity and water quality control for development projects within the new stormwater ordinance requirements.
E.4	Post-Construction Runoff Control	Pre-Construction Review of BMP Designs	Perform site plan reviews for stormwater BMPs to ensure water quality and water quantity control, as well as constructability and long-term operation and maintenance.	Enact stormwater ordinance which requires both stormwater quantity and quality control. Perform reviews in accordance with stormwater ordinance to ensure constructability and long-term operation and maintenance of BMPs.	Enforce stormwater ordinance which requires both stormwater quantity and quality control. Perform reviews in accordance with stormwater ordinance to ensure constructability and long-term operation and maintenance of BMPs.
E.5	Post-Construction Runoff Control	Site Inspections During Construction	Require owners / permittees to perform regular site inspections during the life of a construction project. Provide a formal checklist for large (1 ac+) permitted sites to fulfill erosion control requirements for weekly and after-rain inspections. A pre-construction meeting shall be set up for all large construction activities to review SWPPP's and discuss erosion and sediment control procedures.	Upon enactment of the new erosion control ordinance, all permittees will be required to perform regular site inspections and subsequent maintenance, to meet the requirements of Part IV.B.4.a.vii, as well as Parts IV.B.4.a.i and .iv of the MS4 permit.	Perform occasional site inspections as part of the new erosion control ordinance verification/enforcement process. Track permits and inspections.
E.6.1	Post-Construction Runoff Control	Post-Construction Inspections	Inspect each permitted construction site during final inspection for conformance with the project specific BMPs as part of the building inspection process. Perform site inspections when issues are reported by the public.	Inspect each permitted construction site during final inspection for conformance with the project specific BMP's as part of the building inspection process. Perform site inspections when issues are reported by the public.	Inspect permitted post-construction sites. Respond to reported public issues.
E.6.2	Post-Construction Runoff Control	Post-Construction Inspections	Perform maintenance inspections of all City-owned water quality and water quantity stormwater facilities at least once every 3 years. Perform maintenance inspections or request maintenance inspection records of all privately owned water quality and water quantity stormwater facilities at least once every 3 years.	Begin inspection of City-owned stormwater ponds.	Perform maintenance inspections of all City-owned water quality and water quantity stormwater facilities at least once every 3 years. The City owns 6 wet basins, 1 dry basin, and 2 green infrastructure facilities.

ATTACHMENT B - 2016-2017 NPDES STORMWATER ACTIVITY REPORT - CITY OF DANVILLE, ILLINOIS



BMP ID	BMP CATEGORY	BMP SUBCATEGORY	BMP DESCRIPTION	MEASUREABLE GOAL	YEAR 2 MILESTONE
E.7	Post-Construction Runoff Control	Other Post-Construction Runoff Controls	Develop and implement a program to minimize the volume of stormwater runoff and pollutants from existing privately owned developed property.	Implement the 8 different categories required per ILR40 Part IV.B.5.e	Continue implementation of completed categories. Develop program for source identification (i); evaluation of flood control as related to climate change (iii). Improve education on green infrastructure BMPs (ii).
F.1	Pollution Prevention/ Good Housekeeping	Employee Training Program	Provide training for employees for storm water quality issues or that have routine contact with chemical substances, pesticides and herbicide applications, salt and calcium applications, or abatement and containment of hazardous material spills.	Conduct applicable training annually and for all new employees. Part IV.B.6.a-d Provide RainCheck training video for all public works field crew personnel.	Provide training to Public Works and Parks Department Personnel.
F.2.1	Pollution Prevention/ Good Housekeeping	Inspection and Maintenance Program	Document City's annual storm water maintenance program.	Provide routine maintenance to all public storm water infrastructure as needed and per maintenance schedule. Document maintenance activities.	Document City's annual storm water maintenance program within the annual report.
F.2.2	Pollution Prevention/ Good Housekeeping	Inspection and Maintenance Program	Prepare Storm Water Pollution Prevention Plan (SWPPP) for all applicable municipal facilities.	Update SWPPPs as needed. Follow up on inspections from previous year; perform annual inspection. Goal is to reduce findings of concern by 10% each year.	Update SWPPPs as needed. Follow up on inspections from previous year; perform annual inspection each fall. Goal is to reduce findings of concern by 10% each year.
F.4.1	Pollution Prevention/ Good Housekeeping	Municipal Operations Waste Disposal	Maintain garbage and yard waste collection.	Garbage and yard waste collection is provided on a weekly basis to keep waste out of storm sewer systems.	Continue garbage and yard waste collection methods.
F.4.2	Pollution Prevention/ Good Housekeeping	Municipal Operations Waste Disposal	Control vehicle and equipment washing by performing all washes in an enclosed washing bay which drains to sanitary sewer.	Construct a washbay during the summer or fall of 2017 to contain and treat all washwater from municipal vehicle washing.	Wash all public works vehicles and equipment in an enclosed bay.
F.4.3	Pollution Prevention/ Good Housekeeping	Municipal Operations Waste Disposal	Oil and fluid disposal program to dispose of oils and fuels by a licensed waste hauler.	Dispose of oil and oil filters every other month for oil. Dispose of other fluids as needed.	Dispose of oil every other month for oil. Dispose of other fluids as needed.
F.4.4	Pollution Prevention / Good Housekeeping	Municipal Operations Waste Disposal	Maintain a proper disposal area for all vector truck disposal materials from both sanitary and storm sewer systems. All liquids shall be discharged to the sanitary sewer system and all dry materials collected and disposed of as solid waste.	Dispose of all vector truck materials at the proper disposal area. Look into the possibility of construction a few facility with a larger capacity and better filter system.	Ensure all vector trucks are using the facility. This includes all trucks which have collected stormwater, not just sanitary sewer collections.
F.6	Pollution Prevention/ Good Housekeeping	Other Municipal Operations Controls	Sweep all streets in the City at least once before September and twice between September and November.	Reducing storm sewer clogging at inlets and piping. Increase the street sweeping frequency as needed.	Sweep all streets in the City at least once before September and twice between September and November. Track lane-miles swept and volume of debris collected.

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City of Danville

MS4 Monitoring Plan – August 26, 2016

To be implemented beginning Fall 2016. Initial implementation to be reported in the Annual Report documenting April 2016 to March 2017.

Sampling Plan Overview

1. Background

The State of Illinois issues a General National Pollutant Discharge Elimination System (NPDES) Permit No ILR40 to Small Municipal Separate Storm Sewer Systems (MS4s). The most recent MS4 permit was issued in February 2016, becoming effective March 1, 2016.

The permit has a variety of stormwater Best Management Practices (BMPs) to be implemented. Several of the BMPs coincide closely together, and can be implemented alongside each other.

Part IV.3.a of the permit requires the permittee to “develop, implement and enforce a program to detect and eliminate illicit connections”.

Part IV.3.b requires the permittee to “develop, if not already complete, a storm system map, showing the location of all outfalls” with the requirement that the map be updated with any new modifications.

Part IV.3.h requires the permittee to “conduct periodic inspections of the storm sewer outfalls in dry weather...placing priority on outfalls with the greatest potential for non-storm water discharges. Major/high priority outfalls shall be inspected at least annually.”

Parts IV.3.a and IV.3.h together will be considered an Illicit Discharge Detection & Elimination (IDDE) Program.

Part V.A of the permit requires the permittee to “develop and implement a monitoring and assessment program to evaluate the effectiveness of the BMPs being implemented to reduce pollutant loadings and water quality impacts within 180 days of the effective date of this permit”.

The information presented herein is the City of Danville’s Monitoring and Assessment Plan, incorporating the other permit requirements, to be established and implementation started no later than August 28, 2016.

2. Monitoring and Assessment Plan Requirements

ILR40 allows for monitoring and assessing stormwater BMPs through a variety of methods, presented in Part V.A.1 and V.A.2. Some of the various monitoring options include visual monitoring for MS4 permittees serving

populations of less than 25,000, as well as in-stream monitoring, sediment monitoring, site-specific monitoring, assessing physical/habitat characteristics, and outfall/discharge monitoring.

3. City of Danville's Monitoring and Assessment Plan Approach

It is our understanding of the ILR40 permit that the State of Illinois would prefer for municipalities to perform comprehensive in-stream water quality monitoring. This monitoring would include sampling and testing for parameters including total suspended solids, total nitrogen, total phosphorous, fecal coliform, chlorides, and oil and grease. However, contractor-performed sampling and lab testing is an expensive endeavor which Danville cannot budget at this time.

The City of Danville has decided to approach the Monitoring and Assessment requirements through visual evaluation of outfalls/discharges. Though the City serves a population greater than 25,000 (approximately 33,000), visual observations of stormwater at priority outfalls will serve the intent of the permit, without creating issues due to the funding limitations which generally restrict laboratory-based monitoring. Using a basic checklist, field personnel can monitor both dry and wet weather events to include the visual monitoring requirements listed (color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen or other obvious indicators of stormwater pollution). Personnel can also assess outfalls for any structural issues such as broken pipes, heavy erosion, or blocked flow ways.

Regular annual inspections of storm sewer systems for these pollution indicators creates an Illicit Discharge Detection and Stormwater Pollution Monitoring and Assessment program, serving as an indication of upstream stormwater control. Illicit Discharges are non-stormwater flows, often sanitary sewer cross-connections or industrial discharges. Stormwater pollution sources are usually spills, leaks, or materials dumped onto the ground and washed into nearby storm drains or waterways.

a. 2016 Baseline Assessments and Inspections

The ILR40 MS4 permit is effective from March 2016 to February 2021. To evaluate the effectiveness of the stormwater BMPs during the permit's 5 year period, initial baseline assessments are needed. Subsequent inspections will help determine what progress is being made, and will guide inspection and mitigation efforts. As previously stated, the permit requires the following:

- *Illicit Discharge Detection & Elimination (IDDE)

- *Monitoring and Assessment to evaluate effectiveness of BMPs

 - Outfall monitoring with visual observations

Because the IDDE and Monitoring and Assessment inspections go hand-in-hand, we plan to implement them together. Dry weather outfall monitoring will be used to inspect for Illicit Discharges, as well as structural integrity inspections of specific outfall structures. Wet-weather outfall monitoring will occur at many of the same locations to inspect for discharges that may be carried by stormwater (surface oil spills, etc.) but may not be constantly flowing like other illicit discharges (ie, cross-connections from sanitary sewers or illegal discharges from industrial areas).

Outfalls monitored in wet weather can indicate pollution upstream. Flows with bad odor, unusual color, or signs of oil, etc. can be tracked upstream to hopefully pinpoint and then eliminate the pollutant sources.

b. Prioritization and Re-inspection

There are estimated to be over 300 outfall pipes within the City of Danville. This includes pipes flowing to stormwater ponds, streams, creeks and Lake Vermillion. Due to the large quantity of outfalls and the limited number of staff and stormwater funding, Danville will monitor only high priority outfalls considered to have the greatest potential for non-stormwater discharges. Using a combination of GIS data and employee knowledge, sites will be evaluated and prioritized for inspection. The City of Danville anticipates 5 – 10% of our outfalls to be considered high priority. After the program has been fully developed and an initial inspection has been performed, sites can be re-evaluated to see if they are still considered high-priority. Any cleanup, mitigation or maintenance performed should be taken into consideration as to the need for further monitoring at each individual site.

Sampling Plan

1. Designating priority inspection areas.

To incorporate the IDDE and Monitoring and Assessment inspections, the City of Danville will designate priority inspection areas based on watershed land use and outfall pipe size. Utilizing current GIS information, along with employee interviews, and historic maps and inspection reports, certain outfalls will be targeted for the initial monitoring.

a. Land Use Outfalls (LUO)

The watersheds with the greatest potential for non-stormwater discharges come from the industrial sites in Danville. Danville has a great history and culture of industry and manufacturing. Along with this comes the site conditions which often contribute to stormwater pollution. Outdoor areas holding storage tanks, fueling areas, chemical usage, etc. often accompany an industrial site. Within the 18 square miles of Danville's city limits, over 340 structures covering approximately 240 acres are industrial buildings, with an unknown area of associated outdoor storage areas. Employing institutional knowledge through employee interviews, we plan to prioritize and inspect the highest priority outfalls from the watersheds which include the sites with outdoor storage areas.

b. Pipe Size Outfalls (PSO)

Erosion is most often caused by large volumes of stormwater flowing quickly across a site or out of a pipe and into a waterway or other open channel. The largest volumes of stormwater will generally be coming from the largest pipes. We plan to prioritize outfall monitoring at the largest outfalls in our system. Using some baseline employee knowledge and GIS information, Danville estimates we have hundreds of outfall pipes, but a limited number of large (48" or greater) pipes. These outfalls will be monitored and inspected for stormwater flow and structural integrity, including erosion issues.

2. Create Site Inventory and Watershed Map for Each Monitoring Category

a. Utilize GIS Maps

The City of Danville has a well-developed GIS system, with roads, buildings, waterways, sanitary sewers, etc. included in it. Danville has also been working to include the stormwater system in the GIS. The GIS currently contains about 2000 stormwater structures and about 70 miles of stormwater piping. Though formidable, this number is estimated to be about one-quarter of the total stormwater structures in Danville. We will continue to update the GIS as data is collected through site plans and field crew inspections. It is our understanding that we have until the end of the permit cycle (February 2021) to complete the storm sewer map in its entirety.

The GIS system also has a complete LIDAR topographical map of Danville and the surrounding areas. As of August 2016, Danville is working to use this topographic map, along with a computer software program, to create a watershed map of the City. The map will eventually include all waterways and stream paths, including flow paths through individual lots and down city streets. Watershed delineations will also be possible, with watersheds able to be outlined for any given point on the map.

Combining GIS information with employee knowledge, an inventory of the highest priority monitoring locations will be created. Once a finite list of industrial areas with the greatest potential for non-stormwater discharges is created, along with the large pipe locations, these areas will be put on a MS4 monitoring map/layer. Inventories will be started as EXCEL spreadsheets, but given to GIS personnel for inclusion in the City of Danville's GIS mapping system. We plan for the data to be included in a usable and searchable form within the GIS system within six months of inventory creation to enable use before the next inspection cycle. Initial data collection will include at a minimum for each point of interest: map location, GIS/GPS coordinates, and links to any photos, reports and site plans as applicable.

Each monitoring location can then have its watershed/drainage point mapped. Watersheds covering the priority land-use areas will be utilized so the correct outfalls/pipes may be inspected. Inspection points may be day-lighted outfall pipes or manhole junctions. The smallest applicable watershed will be inspected, allowing stormwater runoff from surrounding areas to be minimized to ensure the water that is visually inspected is only coming from the areas of concern.

Outfall pipes' watersheds will be utilized to determine approximate drainage areas and land uses contributing to those pipes.

b. Sewer Personnel Inspections

Danville continues to update the stormwater maps, and plans to utilize sewer inspection and maintenance personnel when available to collect data in a more structured means. If specific piping information is needed for certain outfall locations, personnel will be asked to gather this data for use in identifying monitoring locations and/or requirements. The storm sewer information will then also be put into the GIS maps to continue the mapping effort.

Per the City of Danville stormwater master plan, approximately 10% of the stormwater infrastructure should be inspected each year for structural integrity. These inspections will be done by the Public Works sewer crews. To facilitate water quality sampling/inspections, we plan to train field crew staff to perform the Monitoring and Assessment inspections while investigating the pipe conditions, per the master plan. Crews can collect the needed information with little extra time at each site, while enabling the sampling and monitoring processes to be performed in a more timely and efficient manner. The City of Danville's engineering department currently employs several engineers. However, with only one part-time stormwater-focused employee, field work assistance will be highly needed to keep up with the monitoring requirements. The sewer crews will have to be "borrowed" to assist with stormwater projects on an as-needed basis. Implementation of the stormwater master plan will be commensurate with funding availability.

3. Perform Baseline Inspections For The Different Sampling and Inspection Types

a. Land-Use Outfalls (LUO)

i. *Dry-Weather IDDE and Structural Inspections*

Use the newly created watershed map, pinpoint each LUO location. Each location will have a topographical watershed associated with it. Perform a dry-weather visual inspection of each LUO. Use the Outfall Inspection Report form (to be created by the City of Danville) to document the structural state of the outfall, as well as visually inspect any flow in the outfall system. Inspection reports shall include site map with GPS/GIS coordinates, map of watershed and approx. watershed size, photos and photo location/direction, pipe/outfall conditions (sedimentation/erosion, broken/degraded structures, signs of illicit discharges, etc.) Dry-weather inspections shall be performed at least 48 hours after the last rain event of 1" or less and at least 72 hours after the last rain event of more than 1". Flow found during dry-weather inspections is often a sign of concern, and possibly an illicit discharge. Fully investigate and document any flows found.

Priority dry-weather (IDDE) inspections for the LUOs shall take place annually during the spring to early fall when more maintenance work is generally performed (April – Sept). These inspections should follow protocols found in the Illinois Urban Manual.

ii. *Wet-Weather Visual Monitoring and Inspections*

Wet-weather inspections shall be performed at the same LUO locations. Wet-weather inspections should be completed within 48 hours after a rain event of 1/2" or more. Flow found during wet-weather inspections should be visually inspected using the Outfall Inspection Report form to fully document the flow characteristics. The visual monitoring requirements listed (color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen or other obvious indicators of stormwater pollution) will be noted. Fully investigate and document any signs of non-stormwater flows found.

b. **Pipe Size Outfalls (PSO)**

Dry-Weather IDDE and Structural Inspections

Use the newly created sub-watershed map, pinpoint each PSO location. Each location will have a topographical watershed associated with it. Perform a dry-weather visual inspection of each PSO. Use the Outfall Inspection Report form (to be created by the City of Danville) to document the structural state of the outfall, as well as visually inspect any flow in the outfall system. Inspection reports shall include site map with GPS/GIS coordinates, map of watershed and approx. watershed size, photos and photo location/direction, pipe/outfall conditions (sedimentation/erosion, broken/degraded structures, signs of illicit discharges, etc.). Dry-weather inspections shall be performed at least 48 hours after the last rain event of 1" or less and at least 72 hours after the last rain event of more than 1". Flow found during dry-weather inspections is often a sign of concern, and possibly an illicit discharge. Fully investigate and document any flows found.

Priority dry-weather (IDDE) inspections for the PSOs shall take place annually. Due to the fact that large stormwater pipes will often discharge to rivers and creeks, the outfalls are likely to be in difficult to reach locations, with woods and/or shrubbery making access and visual inspection difficult. Care shall always be taken to ensure safety. Inspections in the winter months when plant growth has died back will facilitate site access.

Corrective Action, Documentation and Reporting

1. Visual Monitoring and/or Illicit Discharge Reporting, Documenting and Follow-up

- a. If any illicit discharges are found or suspected, reporting must be done immediately according to the Standard Operating Procedures (SOP) for IDDE Corrective Action, Documentation & Reporting form (to be created by City of Danville).
- b. All other visual monitoring findings and reports shall be documented and reported per the SOP for Stormwater Monitoring (to be created by City of Danville) in a timely manner (within 1 week if corrective measures are necessary, and within 2 weeks if no corrective measures are required.)

2. Outfall/Pipe structural issues Reporting, Documenting and Follow-up

- a. For structural conditions of stormwater pipe, conduit, manholes or other structures, reports shall be documented and reported per the SOP for Outfall / Pipe Conditions Corrective Action, Documentation &

Reporting (to be created by City of Danville) in a timely manner (within 1 week if corrective measures are necessary, and within 2 weeks if no corrective measures are required.)

- b. Follow-up conversations and/or inspections shall take place as soon as practicable to ensure the stormwater conveyance system is restored to a fully functioning capacity. Broken, clogged or otherwise dysfunctional stormwater piping can cause erosion and/or flooding issues within the City of Danville.

Annual Re-evaluation of Priority Locations

1. Re-inspection

After the first round of IDDE / Monitoring and Assessment inspections are complete, inspection points should be evaluated and prioritized for future inspections. Points which had obvious signs of Illicit Discharges or Stormwater Pollution should remain as high priority locations, to be inspected again within one year. Areas with no signs of pollutants can be dropped to an inspection frequency of every 2 years.

Follow-up inspections shall take place for any site for which remedial action has taken place. The site shall be evaluated for the effectiveness of the remediation and of the inspection procedures.

Determinations should be made as to whether specific locations can be removed from the priority inspection list, or if new areas need to be added to the list based on new land use data. A means of tracking the points of inspection, priority levels for inspection frequency, and inspection results should be created.

2. Long-term Monitoring and Evaluation

Each LUO and PSO shall be evaluated over the permit period (2016-2021) to determine the long-term effectiveness of the IDDE and Stormwater Monitoring programs. Illicit Discharges and outfall inspection results should be tracked to see long-term trends in monitoring results. It is anticipated (and the purpose of the NPDES permit) that the monitoring program will show a positive trendline toward a reduction in Illicit Discharges and pollutant loads. If trends show an increase in pollutants, the program should be re-evaluated to determine a better and/or different approach to the MS4 program. Additional and/or different BMPs may be necessary to better meet the intent of the permit.

Other MS4 Requirements

1. Site Walks / SWPPP Inspections for Target Locations

Per ILR40 Part IV.6.b, “the permittee shall design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants from municipal properties, infrastructure, and operations.” And for these measures, must “provide regular inspection of municipal storm water management BMPs.”

The City of Danville operates several municipal storage facilities. The two main facilities are the Public Works Department building and the South Street storage facility. The Public Works Department building houses most of the municipal trucks, an indoor maintenance facility, a salt storage dome, fuel and oil storage, concrete and gravel storage, parks department storage, as well as leasing part of the facility to Ameren.

South Street storage facility houses a salt dome, gravel and landscaping storage, a vacuum truck cleanout facility, roadway brick storage, paint and chemical storage, and other miscellaneous stored items.

PWD has a site SWPPP, written in 2014. The most recent site inspection took place during the first week of August 2016. Pollution prevention concerns and stormwater mapping concerns have been addressed in the report. Public works personnel will begin addressing the inspection report concerns as soon as practicable.

The South Street storage facility currently does not have a SWPPP. Danville plans to develop a site SWPPP for the facility before the end of this permit cycle (February 2021). The site will be inspected using the PWD SWPPP as an inspection guide before the end of the reporting year (February 2017).

The remaining municipal storage facilities are much smaller. They include the golf course (fuel and chemical storage), police station (fuel storage), four fire stations (backup generators with fuel storage), and the City Pool (chemical storage). These sites will be inspected as deemed necessary.

2. WQ BMP Inventory and Inspections

a. Create a Stormwater BMP inventory from known WQ BMPs

- i. Ponds, permeable pavers/concrete, WQ swales, cisterns, bioretentions, raingardens, etc.
- ii. Inventory should include a link to site plans, photos, and maintenance agreements as applicable.

b. Perform a wet-weather visual inspection of each WQ BMP owned by the City of Danville.

Document the structural state of the BMP, as well as visually inspect any flow in the system. Ensure the BMP is working as designed, is not clogged, eroded, causing erosion, plant materials are in good condition, flooding is not occurring, etc. Note any maintenance that needs performed to meet any Maintenance Agreement requirements. Inspection reports shall include site map with GPS/GIS coordinates, map of watershed and approx. watershed size, photos and photo location/direction, pipe/outfall conditions (sedimentation/erosion, broken/degraded structures, etc). BMPs should be inspected at least biennially.

c. **Add Private BMPs to the Inventory.**

As Danville moves forward with “green” initiatives, and small-scale stormwater BMPs are implemented on private property, a means of inspection and monitoring should be developed to ensure these facilities are being maintained properly. Possibilities include access permission within the maintenance agreements, with the City performing the inspections and issuing maintenance requirements to the property owners, or sending owners maintenance reminders with instructions and reporting measures within the reminder. The former is much more labor intensive for the City, but will likely result in better BMP maintenance. The latter is less labor intensive, but may result in poor to mediocre maintenance taking place. BMPs should be inspected at least biennially.

3. **Detect and Address Non-Stormwater and Illegal Dumping**

a. **Create a Non-Stormwater Discharges Outreach and Reporting Program**

Non-stormwater discharges are a direct source of stormwater pollution. These can include a wide variety of sources: Oils & grease from restaurants, oil and other liquids from at-home car repairs, car wash water, dog waste, paints and chemicals from at-home projects, fertilizer use, sidewalk salt, etc.

Per ILR40 Part IV.B.3.d, Danville shall “implement a plan to detect and address non-stormwater discharges, including illegal dumping” and shall “inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste and the requirements and mechanisms for reporting such discharges” (IV.B.3.e). And must “distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies” with information on the following topics: (IV.B.1.a)

- i. Storage and disposal of fuels, oils and similar materials
- ii. Use of soaps, solvents or detergents
- iii. Paint and related décor
- iv. Lawn and garden care; and
- v. Winter de-icing material storage and use.

Public education through flyers and the city’s website are probably the best means of addressing these issues. The City of Danville’s stormwater website www.danville-stormwater.org currently has some of the required information posted. There is a link for reporting stormwater concerns as well. We will continue to develop the website and the information it contains to fully incorporate all of the required materials. We will also work to promote the website and the information therein. We will also work to better display the stormwater reporting form and/or create a reporting hotline.

b. Create an Illegal Dumping Program

Illegal Dumping is often associated with stormwater pollution, and as-such Danville is required to implement a program to detect and address illegal dumping per the MS4 permit. Illegal dumping often occurs in the same areas of a city or town on a recurring basis. Creating a database and GIS map of illegal dumping locations can facilitate an inspection schedule for these areas. Public education and information on reporting illegal dumping shall be included in the program.

- i. Perform quarterly or bi-annual drive-by inspections of any sites known to be dumping sites.
- ii. Sites found to have trash or debris illegally dumped shall be reported within 1 week per the Illegal Dumping SOP (to be created by the City).
- iii. Create an inventory of existing dumping sites. A GIS mapping layer should also be created for ease of reporting. Any new locations found to have illegal dumping shall be added to the GIS map and inventory with general information.

Public education through flyers and the city's website are probably the best means of addressing these issues. Danville plans to create an illegal dumping flyer and/or webpage for public education about the risks and costs of illegal dumping. It will include information on how to report illegal dumping. We plan to highlight the stormwater reporting link currently on the website as well.

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City of Danville

MS4 Monitoring Plan – August 26, 2016

To be implemented beginning Fall 2016. Initial implementation to be reported in the Annual Report documenting April 2016 to March 2017.

Sampling Plan Update

1. Update #1 – December 2016

Since the end of August, 2016, the City of Danville has been working to implement this sampling plan. Task lists and schedules have been drawn up. Historic sewer maps have been referenced. GIS layers and various maps have been created or updated. And this plan has been referenced as, and is considered to be, a living document.

Changes found to be needed for various reason, have been made to this document. Previous version(s) are available for back reference.

Sampling Plan Overview

1. Background

The State of Illinois issues a General National Pollutant Discharge Elimination System (NPDES) Permit No ILR40 to Small Municipal Separate Storm Sewer Systems (MS4s). The most recent MS4 permit was issued in February 2016, becoming effective March 1, 2016.

The permit has a variety of stormwater Best Management Practices (BMPs) to be implemented. Several of the BMPs coincide closely together, and can be implemented alongside each other.

Part IV.3.a of the permit requires the permittee to “develop, implement and enforce a program to detect and eliminate illicit connections”.

Part IV.3.b requires the permittee to “develop, if not already complete, a storm system map, showing the location of all outfalls” with the requirement that the map be updated with any new modifications.

Part IV.3.h requires the permittee to “conduct periodic inspections of the storm sewer outfalls in dry weather...placing priority on outfalls with the greatest potential for non-storm water discharges. Major/high priority outfalls shall be inspected at least annually.”

Parts IV.3.a and IV.3.h together will be considered an Illicit Discharge Detection & Elimination (IDDE) Program.

Part V.A of the permit requires the permittee to “develop and implement a monitoring and assessment program to evaluate the effectiveness of the BMPs being implemented to reduce pollutant loadings and water quality impacts within 180 days of the effective date of this permit”.

The information presented herein is the City of Danville's Monitoring and Assessment Plan, incorporating the other permit requirements, to be established and implementation started no later than August 28, 2016.

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ILR40 allows for monitoring and assessing stormwater BMPs through a variety of methods, presented in Part V.A.1 and V.A.2. Some of the various monitoring options include visual monitoring for MS4 permittees serving populations of less than 25,000, as well as in-stream monitoring, sediment monitoring, site-specific monitoring, assessing physical/habitat characteristics, and outfall/discharge monitoring.

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It is our understanding of the ILR40 permit that the State of Illinois would prefer for municipalities to perform comprehensive in-stream water quality monitoring. This monitoring would include sampling and testing for parameters including total suspended solids, total nitrogen, total phosphorous, fecal coliform, chlorides, and oil and grease. However, contractor-performed sampling and lab testing is an expensive endeavor which Danville cannot budget at this time.

The City of Danville has decided to approach the Monitoring and Assessment requirements through visual evaluation of outfalls/discharges. Though the City serves a population greater than 25,000 (approximately 33,000), visual observations of stormwater at priority outfalls will serve the intent of the permit, without creating issues due to the funding limitations which generally restrict laboratory-based monitoring. Using a basic checklist, field personnel can monitor both dry and wet weather events to include the visual monitoring requirements listed (color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen or other obvious indicators of stormwater pollution). Personnel can also assess outfalls for any structural issues such as broken pipes, heavy erosion, or blocked flow ways. Visual monitoring on this level will be superior to a simple sediment monitoring program (an acceptable form of monitoring for any sized municipality), looking only for turbidity of outfall discharge waters.

Regular annual inspections of storm sewer systems for the various pollution indicators creates an Illicit Discharge Detection and Stormwater Pollution Monitoring and Assessment program, serving as an indication of upstream stormwater control. Illicit Discharges are non-stormwater flows, often sanitary sewer cross-connections or industrial discharges. Stormwater pollution sources are usually spills, leaks, or materials dumped onto the ground and washed into nearby storm drains or waterways.

a. 2016 Baseline Assessments and Inspections

The ILR40 MS4 permit is effective from March 2016 to February 2021. To evaluate the effectiveness of the stormwater BMPs during the permit's 5 year period, initial baseline assessments are needed. Subsequent inspections will help determine what progress is being made, and will guide inspection and mitigation efforts. As previously stated, the permit requires the following:

*Illicit Discharge Detection & Elimination (IDDE)

*Monitoring and Assessment to evaluate effectiveness of BMPs

-Outfall monitoring with visual observations

Because the IDDE and Monitoring and Assessment inspections go hand-in-hand, we plan to implement them together. Dry weather outfall monitoring will be used to inspect for Illicit Discharges, as well as structural integrity inspections of specific outfall structures. Wet-weather outfall monitoring will occur at the same locations to inspect for discharges that may be carried by stormwater (surface oil spills, etc.) but may not be constantly flowing like other illicit discharges (ie, cross-connections from sanitary sewers or illegal discharges from industrial areas).

Outfalls monitored in wet weather can indicate pollution upstream. Flows with bad odor, unusual color, or signs of oil, etc. can be tracked upstream to hopefully pinpoint and then eliminate the pollutant sources.

b. Prioritization and Re-inspection

There are estimated to be over 300 outfall pipes within the City of Danville. This includes pipes flowing to stormwater ponds, streams, creeks and Lake Vermillion. Danville has chosen to monitor only the large pipe outfalls – those pipes 24” and larger. These larger pipes will generally have larger and/or more impervious drainage areas, with the highest potential for stormwater pollution. Monitoring these locations will give us a broad view of the water quality within the City of Danville.

Referencing historic maps and current GIS data, we found 85 such outfalls. The watersheds for these pipes collect stormwater from the majority of the city. After the program has been fully developed and an initial inspection has been performed, sites can be re-evaluated to see if they are still considered high-priority. Any cleanup, mitigation or maintenance performed should be taken into consideration as to the need for further monitoring at each individual site. Pipes found to have a trend of no signs of pollution, with lower pollution potential watersheds, may be removed from the monitoring as deemed appropriate.

Sampling Plan

1. Designating priority inspection areas.

To incorporate the IDDE and Monitoring and Assessment inspections, the City of Danville will designate priority inspection areas based outfall pipe size. Utilizing current GIS information, along with employee interviews, and historic maps and inspection reports, outfalls with pipes of 24” or larger will be targeted for the initial monitoring. The largest pipes (36” and larger) will be considered to be higher priority, as these will likely have larger watersheds associated with them.

Erosion is most often caused by large volumes of stormwater flowing quickly across a site or out of a pipe and into a waterway or other open channel. The largest volumes of stormwater will generally be coming from the largest pipes. We plan to prioritize outfall monitoring at the largest outfalls in our system. Using some historic infrastructure maps and GIS information, Danville estimates we have hundreds of outfall pipes, but a limited number of large (24" or greater) pipes. These outfalls will be monitored and inspected for stormwater flow and structural integrity, including erosion issues.

Though the larger pipes will all be initially inspected, the watersheds with the greatest potential for non-stormwater discharges come from the industrial sites in Danville. Danville has a great history and culture of industry and manufacturing. Along with this comes the site conditions which often contribute to stormwater pollution. Outdoor areas holding storage tanks, fueling areas, chemical usage, etc. often accompany an industrial site. Within the 18 square miles of Danville's city limits, over 340 structures covering approximately 240 acres are industrial buildings, with an unknown area of associated outdoor storage areas. Knowing this, we decided to inspect 24" outfall pipes, because this will provide the most thorough monitoring of the City's wide variety of land uses.

2. Create Site Inventory and Watershed Map for Each Monitoring Category

a. Utilize GIS Maps

The City of Danville has a well-developed GIS system, with roads, buildings, waterways, sanitary sewers, etc. included in it. Danville has also been working to include the stormwater system in the GIS. The GIS currently contains about 2000 stormwater structures and about 70 miles of stormwater piping. Though formidable, this number is estimated to be about one-quarter of the total stormwater structures in Danville. We will continue to update the GIS as data is collected through site plans and field crew inspections. It is our understanding that we have until the end of the permit cycle (February 2021) to complete the storm sewer map in its entirety.

The GIS system also has a complete LIDAR topographical map of Danville and the surrounding areas. As of November 2016, Danville has used this topographic map, along with a computer software program, to create a watershed map of the City. The map includes all waterways and stream paths, including flow paths through individual lots and down city streets. Watershed delineations will also be possible, with watersheds able to be outlined for any given point on the map.

We have, however, discovered limitations to our watershed maps. The maps only account for the terrain of the land. Stormwater pipes which go under or through barriers, such as railroad beds, are not taken into account. Due to this current limitation, the watershed maps will only be marginally useful at this time. They will give us a rough idea of contributing areas. And if certain pipes are known to cross physical barriers, we can manually check upstream to track the sub-watersheds as appropriate.

City Staff has worked this fall to map all the 24" and larger outfalls into the GIS system. Considerable time cross-referencing current GIS data with historic maps has given a complete list of large outfalls to be inspected.

The GIS time has worked this fall to create a monitoring program for an iPad, which can be used to monitor outfalls in the field. All outfall monitoring parameters (date, inspector, pipe size, weather conditions, flow characteristics like volume, color, clarity and smell) have been added to an app on the iPad. Inspectors can pull up each outfall in GIS. The inspection is performed. Location information is automatically recorded. Photos can be attached to the inspection. Data is then uploaded in real-time to Danville's GIS. Meaning, anyone in the office can access the information collected immediately.

The data is immediately usable and searchable within the GIS system. Inspection reports can be found based on any of the reporting criteria, and past reports for any given outfall can be retrieved. Reports can be run, as needed, to be available in printed format as well. File creation is a bit cumbersome, but is possible. Paper reports may be needed for public works crew members, MS4 reporting, or other such instances. A sample data report is now included in this plan.

b. Sewer Personnel Inspections

Danville continues to update the stormwater maps, and plans to utilize sewer inspection and maintenance personnel when available to collect data in a more structured means. If specific piping information is needed for certain outfall locations, personnel will be asked to gather this data for use in identifying monitoring locations and/or requirements. The storm sewer information will then also be put into the GIS maps to continue the mapping effort. Per the City of Danville stormwater master plan, approximately 10% of the stormwater infrastructure should be inspected each year for structural integrity. These inspections will be done by the Public Works sewer crews. The sewer crews will have to be "borrowed" to assist with stormwater projects on an as-needed basis. Implementation of the stormwater master plan will be commensurate with funding availability.

To perform water quality monitoring inspections, we will employ the Stormwater Engineer, the Engineering Technician, and the Junior Engineer, as needed. The Stormwater Engineer will coordinate the program, and lead the in-field sampling effort. However, the Stormwater Engineer works only part-time. The Engineering Technician and Junior engineer will need to assist with field work to keep up with the monitoring requirements.

3. Perform Baseline Inspections

Dry-Weather IDDE and Structural Inspections

Using the iPad and GIS system, locate each outfall in need of monitoring. Perform a dry-weather visual inspection of each outfall. Use the iPad to document the structural state of the outfall, as well as visually inspect any flow in the outfall system. The SOP for Outfall Inspections shall be used and followed. Dry-weather inspections shall be performed at least 48 hours after the last rain event of 1" or less and at least 72 hours after

the last rain event of more than 1". Flow found during dry-weather inspections is often a sign of concern, and possibly an illicit discharge. It may also be groundwater seepage, or a water main break. Investigate and document any flows found. Monitoring reports shall then be given to Public Works Construction and Maintenance Manager for follow-up.

Priority dry-weather (IDDE) inspections shall take place annually. Due to the fact that large stormwater pipes will often discharge to rivers and creeks, the outfalls are likely to be in difficult to reach locations, with woods and/or shrubbery making access and visual inspection difficult. Care shall always be taken to ensure safety. Inspections in the winter months when plant growth has died back will facilitate site access.

Corrective Action, Documentation and Reporting

1. Visual Monitoring and/or Illicit Discharge Reporting, Documenting and Follow-up

- a. If any illicit discharges are found or suspected, reporting must be done immediately according to the Standard Operating Procedures (SOP) for IDDE Corrective Action, Documentation & Reporting form (to be created by City of Danville).
- b. All other visual monitoring findings and reports shall be documented and reported per the SOP for Stormwater Monitoring (to be created by City of Danville) in a timely manner (within 1 week if corrective measures are necessary, and within 2 weeks if no corrective measures are required.)

2. Outfall/Pipe structural issues Reporting, Documenting and Follow-up

- a. For structural conditions of stormwater pipe, conduit, manholes or other structures, reports shall be documented and reported per the SOP for Outfall / Pipe Conditions Corrective Action, Documentation & Reporting (to be created by City of Danville) in a timely manner (within 1 week if corrective measures are necessary, and within 2 weeks if no corrective measures are required.)
- b. Follow-up conversations and/or inspections shall take place as soon as practicable to ensure the stormwater conveyance system is restored to a fully functioning capacity. Broken, clogged or otherwise dysfunctional stormwater piping can cause erosion and/or flooding issues within the City of Danville.

Annual Re-evaluation of Priority Locations

1. Re-inspection

After the first round of IDDE / Monitoring and Assessment inspections are complete, inspection points should be evaluated and prioritized for future inspections. Points which had obvious signs of Illicit Discharges or Stormwater Pollution should remain as high priority locations, to be inspected again within one year. Areas with no signs of pollutants can be dropped to an inspection frequency of every 2 years.

Follow-up inspections shall take place for any site for which remedial action has taken place. The site shall be evaluated for the effectiveness of the remediation and of the inspection procedures.

Determinations should be made as to whether specific locations can be removed from the priority inspection list, or if new areas need to be added to the list. A means of tracking the points of inspection, priority levels for inspection frequency, and inspection results should be created.

2. Long-term Monitoring and Evaluation

Each outfall shall be evaluated over the permit period (2016-2021) to determine the long-term effectiveness of the IDDE and Stormwater Monitoring programs. Illicit Discharges and outfall inspection results should be tracked to see long-term trends in monitoring results. It is anticipated (and the purpose of the NPDES permit) that the monitoring program will show a positive trendline toward a reduction in Illicit Discharges and pollutant loads. If trends show an increase in pollutants, the program should be re-evaluated to determine a better and/or different approach to the MS4 program. Additional and/or different BMPs may be necessary to better meet the intent of the permit.

3. Detailed inspection approach / Plan of Action (January 2017)

A map of the city with all the large outfalls has been created. The map has been broken into 11 sections, to aid in tracking the

Other MS4 Requirements

1. Site Walks / SWPPP Inspections for Target Locations

Per ILR40 Part IV.6.b, “the permittee shall design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants from municipal properties, infrastructure, and operations.” And for these measures, must “provide regular inspection of municipal storm water management BMPs.”

The City of Danville operates several municipal storage facilities. The two main facilities are the Public Works Department building and the South Street storage facility. The Public Works Department building houses most of the municipal trucks, an indoor maintenance facility, a salt storage dome, fuel and oil storage, concrete and gravel storage, parks department storage, as well as leasing part of the facility to Ameren.

South Street storage facility houses a salt dome, gravel and landscaping storage, a vacuum truck cleanout facility, roadway brick storage, paint and chemical storage, and other miscellaneous stored items.

PWD has a site SWPPP, written in 2014. The most recent site inspection took place during the first week of August 2016. Pollution prevention concerns and stormwater mapping concerns have been addressed in the report. Public works personnel will begin addressing the inspection report concerns as soon as practicable.

The South Street storage facility currently does not have a SWPPP. Danville plans to develop a site SWPPP for the facility before the end of this permit cycle (February 2021). The site was inspected using the PWD SWPPP as an inspection guide in September 2016. Pollution prevention concerns and stormwater mapping concerns have been addressed in the report. Public works personnel will begin addressing the inspection report concerns as soon as practicable.

The remaining municipal storage facilities are much smaller. They include the golf course (fuel and chemical storage), police station (fuel storage), four fire stations (backup generators with fuel storage), and the City Pool (chemical storage). These sites will be inspected as deemed necessary.

2. WQ BMP Inventory and Inspections

a. Create a Stormwater BMP inventory from known WQ BMPs

- i. Ponds, permeable pavers/concrete, WQ swales, cisterns, bioretentions, raingardens, etc.
- ii. Inventory should include a link to site plans, photos, and maintenance agreements as applicable.

b. Perform a wet-weather visual inspection of each WQ BMP owned by the City of Danville.

Document the structural state of the BMP, as well as visually inspect any flow in the system. Ensure the BMP is working as designed, is not clogged, eroded, causing erosion, plant materials are in good condition, flooding is not occurring, etc. Note any maintenance that needs performed to meet any Maintenance Agreement requirements. Inspection reports shall include site map with GPS/GIS coordinates, map of watershed and approx. watershed size, photos and photo location/direction, pipe/outfall conditions (sedimentation/erosion, broken/degraded structures, etc). BMPs should be inspected at least biennially.

c. **Add Private BMPs to the Inventory.**

As Danville moves forward with “green” initiatives, and small-scale stormwater BMPs are implemented on private property, a means of inspection and monitoring should be developed to ensure these facilities are being maintained properly. Possibilities include access permission within the maintenance agreements, with the City performing the inspections and issuing maintenance requirements to the property owners, or sending owners maintenance reminders with instructions and reporting measures within the reminder. The former is much more labor intensive for the City, but will likely result in better BMP maintenance. The latter is less labor intensive, but may result in poor to mediocre maintenance taking place. BMPs should be inspected at least biennially.

3. Detect and Address Non-Stormwater and Illegal Dumping

a. **Create a Non-Stormwater Discharges Outreach and Reporting Program**

Non-stormwater discharges are a direct source of stormwater pollution. These can include a wide variety of sources: Oils & grease from restaurants, oil and other liquids from at-home car repairs, car wash water, dog waste, paints and chemicals from at-home projects, fertilizer use, sidewalk salt, etc.

Per ILR40 Part IV.B.3.d, Danville shall “implement a plan to detect and address non-stormwater discharges, including illegal dumping” and shall “inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste and the requirements and mechanisms for reporting such discharges” (IV.B.3.e). And must “distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies” with information on the following topics: (IV.B.1.a)

- i. Storage and disposal of fuels, oils and similar materials
- ii. Use of soaps, solvents or detergents
- iii. Paint and related décor
- iv. Lawn and garden care; and
- v. Winter de-icing material storage and use.

Public education through the city’s website the best and most cost-effective means of addressing these issues. The City of Danville’s stormwater website www.danville-stormwater.org currently has some of the required information posted. There is now a “Report a Stormwater Problem” button prominently displayed on the page. Any reports received are directed to the City Engineer, Assistant City Engineer and Stormwater Engineer. We have also updated the site with a significant amount of information about homeowner pollution prevention and construction site erosion control. We will continue to develop the website and the information it contains to fully incorporate all of the required materials.

b. Create an Illegal Dumping Program

Illegal Dumping is often associated with stormwater pollution, and as-such Danville is required to implement a program to detect and address illegal dumping per the MS4 permit. Illegal dumping often occurs in the same areas of a city or town on a recurring basis. Creating a database and GIS map of illegal dumping locations can facilitate an inspection schedule for these areas. Public education and information on reporting illegal dumping shall be included in the program.

- i. Danville's City Code currently prohibits illegal dumping, as well as littering. Both infractions are subject to fines. The City's website www.cityofdanville.org has a means of reporting illegal dumping. The button to report stormwater issues on the stormwater page is also noted as a means of reporting illegal dumping.

It may also be beneficial to offer additional public education through flyers and the city's website are. Danville intends to create an illegal dumping flyer and/or webpage for public education about the risks and costs of illegal dumping. It will include information on how to report illegal dumping. We plan to highlight the stormwater reporting link currently on the website as well.

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City of Danville

MS4 Monitoring Plan – August 26, 2016

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2. Update #2 – May 2017

Since December 2016, the City of Danville has continued to implement this sampling plan. We have continued to find additional outfall pipes while in the field and in various as-builts which have been referenced. We have also found that several pipes thought to be 24" or larger are in fact smaller than our priority sizing criteria.

Other edits to this report include cleaning up some details and expanding the Baseline Inspections and Detailed Inspections Approach sections.

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1. Background

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The City of Danville has a well-developed GIS system, with roads, buildings, waterways, sanitary sewers, etc. included in it. Danville has also been working to include the stormwater system in the GIS. The GIS currently contains about 10,000 stormwater structures and about 70 miles of stormwater piping. Though formidable, this number is estimated to be about one-quarter to one-half of the total stormwater structures in Danville. We will continue to update the GIS as data is collected through site plans and field crew inspections. It is our understanding that we have until the end of the permit cycle (February 2021) to complete the storm sewer map in its entirety.

The GIS system also has a complete LIDAR topographical map of Danville and the surrounding areas. As of November 2016, Danville has used this topographic map, along with a computer software program, to create a watershed map of the City. The map includes all waterways and stream paths, including flow paths through

individual lots and down city streets. Watershed delineations will also be possible, with watersheds able to be outlined for any given point on the map.

We have, however, discovered limitations to our watershed maps. The maps only account for the terrain of the land. Stormwater pipes which go under or through barriers, such as railroad beds, are not taken into account. Due to this current limitation, the watershed maps will only be marginally useful at this time. They will give us a rough idea of contributing areas. And if certain pipes are known to cross physical barriers, we can manually check upstream to track the sub-watersheds as appropriate.

City Staff has worked this fall to map all the 24" and larger outfalls into the GIS system. Considerable time cross-referencing current GIS data with historic maps has given a complete list of large outfalls to be inspected.

The GIS team has worked this fall to create a monitoring program for an iPad, which can be used to monitor outfalls in the field. All outfall monitoring parameters (date, inspector, pipe size, weather conditions, flow characteristics like volume, color, clarity and smell) have been added to an app on the iPad. Inspectors can pull up each outfall in GIS. The inspection is performed. Location information is automatically recorded. Photos can be attached to the inspection. Data is then uploaded in real-time to Danville's GIS. Meaning, anyone in the office can access the information collected immediately.

The data is immediately usable and searchable within the GIS system. Inspection reports can be found based on any of the reporting criteria, and past reports for any given outfall can be retrieved. Reports can be run, as needed, to be available in printed format as well. File creation is a bit cumbersome, but is done for each inspection. Data is auto-populated, then additional notes are added as appropriate. Paper reports are created for public works crew members, MS4 reporting, or other such instances. A sample data report is now included in this plan.

b. Sewer Personnel Inspections

Danville continues to update the stormwater maps, and plans to utilize sewer inspection and maintenance personnel when available to collect data in a more structured means. If specific piping information is needed for certain outfall locations, personnel will be asked to gather this data for use in identifying monitoring locations and/or requirements. The storm sewer information will then also be put into the GIS maps to continue the mapping effort. Per the City of Danville stormwater master plan, approximately 10% of the stormwater infrastructure should be inspected each year for structural integrity. These inspections will be done by the Public Works sewer crews. The sewer crews will have to be "borrowed" to assist with stormwater projects on an as-needed basis. Implementation of the stormwater master plan will be commensurate with funding availability.

To perform water quality monitoring inspections, we will employ the Stormwater Engineer, the Engineering Technician, and the Junior Engineer, as needed. The Stormwater Engineer will coordinate the program, and lead the in-field sampling effort. However, the Stormwater Engineer works only part-time. The Engineering Technician and Junior engineer will need to assist with field work to keep up with the monitoring requirements.

3. Perform Baseline Inspections

a. Dry-Weather IDDE and Structural Inspections

Using the iPad and GIS system, locate each outfall in need of monitoring. Perform a dry-weather visual inspection of each outfall. Use the iPad to document the structural state of the outfall, as well as visually inspect any flow in the outfall system. The SOP for Outfall Inspections shall be used and followed. Dry-weather inspections shall be performed at least 48 hours after the last rain event of 1" or less and at least 72 hours after the last rain event of more than 1". Flow found during dry-weather inspections is often a sign of concern, and possibly an illicit discharge. It may also be groundwater seepage, or a water main break. Investigate and document any flows found. Monitoring reports shall then be given to Public Works Construction and Maintenance Manager for follow-up.

Priority dry-weather (IDDE) inspections shall take place annually. Due to the fact that large stormwater pipes will often discharge to rivers and creeks, the outfalls are likely to be in difficult to reach locations, with woods and/or shrubbery making access and visual inspection difficult. Care shall always be taken to ensure safety. Inspections in the winter months when plant growth has died back will facilitate site access.

b. Wet Weather Outfall Monitoring Inspections

Using the iPad and GIS system, locate each outfall in need of monitoring. Perform a wet-weather visual inspection of each outfall. Use the iPad to document the structural state of the outfall, as well as visually inspect any flow in the outfall system. The SOP for Outfall Inspections shall be used and followed. Wet-weather inspections shall be performed within 24 hours of the last rain event of 1/2" or more. Flow with any discernable pollutants is a sign of concern. Investigate and document any flows found. Monitoring reports shall then be given to Public Works Construction and Maintenance Manager for follow-up.

Priority wet-weather inspections shall take place annually. Due to the fact that large stormwater pipes will often discharge to rivers and creeks, the outfalls are likely to be in difficult to reach locations, with woods and/or shrubbery making access and visual inspection difficult. Care shall always be taken to ensure safety. Inspections in the winter months when plant growth has died back will facilitate site access.

Corrective Action, Documentation and Reporting

1. Visual Monitoring and/or Illicit Discharge Reporting, Documenting and Follow-up

- a. If any illicit discharges are found or suspected, reporting must be done immediately according to the Standard Operating Procedures (SOP) for IDDE Corrective Action, Documentation & Reporting form (to be created by City of Danville).
- b. All other visual monitoring findings and reports shall be documented and reported per the SOP for Stormwater Monitoring (to be created by City of Danville) in a timely manner (within 1 week if corrective measures are necessary, and within 2 weeks if no corrective measures are required.)

2. Outfall/Pipe structural issues Reporting, Documenting and Follow-up

- a. For structural conditions of stormwater pipe, conduit, manholes or other structures, reports shall be documented and reported per the SOP for Outfall / Pipe Conditions Corrective Action, Documentation & Reporting (to be created by City of Danville) in a timely manner (within 1 week if corrective measures are necessary, and within 2 weeks if no corrective measures are required.)
- b. Follow-up conversations and/or inspections shall take place as soon as practicable to ensure the stormwater conveyance system is restored to a fully functioning capacity. Broken, clogged or otherwise dysfunctional stormwater piping can cause erosion and/or flooding issues within the City of Danville.

Annual Re-evaluation of Priority Locations

1. Re-inspection

After the first round of IDDE / Monitoring and Assessment inspections are complete, inspection points should be evaluated and prioritized for future inspections. Points which had obvious signs of Illicit Discharges or Stormwater Pollution should remain as high priority locations, to be inspected again within one year. Areas with no signs of pollutants for 2 years or more can be dropped to an inspection frequency of every 2 years.

Follow-up inspections shall take place for any site for which remedial action has taken place. The site shall be evaluated for the effectiveness of the remediation and of the inspection procedures.

Determinations should be made as to whether specific locations can be removed from the priority inspection list, or if new areas need to be added to the list. A means of tracking the points of inspection, priority levels for inspection frequency, and inspection results should be created.

2. Long-term Monitoring and Evaluation

Each outfall shall be evaluated over the permit period (2016-2021) to determine the long-term effectiveness of the IDDE and Stormwater Monitoring programs. Illicit discharges and outfall inspection results should be tracked to see long-term trends in monitoring results. It is anticipated (and the purpose of the NPDES permit) that the monitoring program will show a positive trendline toward a reduction in illicit discharges and pollutant loads. If trends show an increase in pollutants, the program should be re-evaluated to determine a better and/or different

approach to the MS4 program. Additional and/or different BMPs may be necessary to better meet the intent of the permit.

3. Detailed inspection approach / Plan of Action (January 2017)

A map of the city with all the large outfalls has been created. The map has been broken into 11 sections, to aid in tracking the outfall locations.

Each outfall is visually inspected for structural problems, erosion upstream or downstream, discoloration, excessive plant growth, and pollutants in the discharge. A sampling pole may be used to collect any flow that is difficult to reach, to allow for visual inspection.

The sampling form is filled in as best as possible to denote outfall conditions. Reports are finalized in the office. Notes are added as necessary. A priority level is assigned with 1 being a severe/emergency priority. 2 is high priority with significant maintenance needed. 3 is medium priority with some maintenance needed. 4 is minor maintenance needed. And 5 is no maintenance needed.

Other MS4 Requirements

1. Site Walks / SWPPP Inspections for Target Locations

Per ILR40 Part IV.6.b, “the permittee shall design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants from municipal properties, infrastructure, and operations.” And for these measures, must “provide regular inspection of municipal storm water management BMPs.”

The City of Danville operates several municipal storage facilities. The two main facilities are the Public Works Department building and the South Street storage facility. The Public Works Department building houses most of the municipal trucks, an indoor maintenance facility, a salt storage dome, fuel and oil storage, concrete and gravel storage, parks department storage, as well as leasing part of the facility to Ameren.

South Street storage facility houses a salt dome, gravel and landscaping storage, a vacuum truck cleanout facility, roadway brick storage, paint and chemical storage, and other miscellaneous stored items.

PWD has a site SWPPP, written in 2014. The most recent site inspection took place during the first week of August 2016. Pollution prevention concerns and stormwater mapping concerns have been addressed in the report. A revised SWPPP was drafted in the fall of 2016. Public works personnel began addressing the inspection report concerns soon after the inspection.

The South Street storage facility was inspected using the PWD SWPPP as an inspection guide in September 2016. Pollution prevention concerns and stormwater mapping concerns have been addressed in the report. Public works personnel began addressing the inspection report concerns soon after the inspection. A draft SWPPP was written in the fall of 2016. As of May 2017, a large portion of the site has been sold. Only the salt dome and vactor truck dumping station remain in City possession. See the 2016-2017 MS4 annual report for further details.

The remaining municipal storage facilities are much smaller. They include the golf course (fuel and chemical storage), police station (fuel storage), four fire stations (backup generators with fuel storage), and the City Pool (chemical storage). These sites will be inspected as deemed necessary.

2. WQ BMP Inventory and Inspections

a. Create a Stormwater BMP inventory from known WQ BMPs

- i. Ponds, permeable pavers/concrete, WQ swales, cisterns, bioretentions, raingardens, etc.
- ii. Inventory should include a link to site plans, photos, and maintenance agreements as applicable.

b. Perform a wet-weather visual inspection of each WQ BMP owned by the City of Danville.

Document the structural state of the BMP, as well as visually inspect any flow in the system. Ensure the BMP is working as designed, is not clogged, eroded, causing erosion, plant materials are in good condition, flooding is not occurring, etc. Note any maintenance that needs performed to meet any Maintenance Agreement requirements. Inspection reports shall include site map with GPS/GIS coordinates, map of watershed and approx. watershed size, photos and photo location/direction, pipe/outfall conditions (sedimentation/erosion, broken/degraded structures, etc). BMPs should be inspected at least every 3 years.

c. Add Private BMPs to the Inventory.

As Danville moves forward with “green” initiatives, and small-scale stormwater BMPs are implemented on private property, a means of inspection and monitoring should be developed to ensure these facilities are being

maintained properly. Possibilities include access permission within the maintenance agreements, with the City performing the inspections and issuing maintenance requirements to the property owners, or sending owners maintenance reminders with instructions and reporting measures within the reminder. The former is much more labor intensive for the City, but will likely result in better BMP maintenance. The latter is less labor intensive, but may result in poor to mediocre maintenance taking place. BMPs should be inspected at least every 3 years.

3. Detect and Address Non-Stormwater and Illegal Dumping

a. Create a Non-Stormwater Discharges Outreach and Reporting Program

Non-stormwater discharges are a direct source of stormwater pollution. These can include a wide variety of sources: Oils & grease from restaurants, oil and other liquids from at-home car repairs, car wash water, dog waste, paints and chemicals from at-home projects, fertilizer use, sidewalk salt, etc.

Per ILR40 Part IV.B.3.d, Danville shall “implement a plan to detect and address non-stormwater discharges, including illegal dumping” and shall “inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste and the requirements and mechanisms for reporting such discharges” (IV.B.3.e). And must “distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies” with information on the following topics: (IV.B.1.a)

- i. Storage and disposal of fuels, oils and similar materials
- ii. Use of soaps, solvents or detergents
- iii. Paint and related décor
- iv. Lawn and garden care; and
- v. Winter de-icing material storage and use.

Public education through the city’s website is the best and most cost-effective means of addressing these issues. The City of Danville’s stormwater website www.danville-stormwater.org currently has some of the required information posted. There is now a “Report a Stormwater Problem” button prominently displayed on the page. Any reports received are directed to the City Engineer, Assistant City Engineer and Stormwater Engineer. We have also updated the site with a significant amount of information about homeowner pollution prevention and construction site erosion control. We will continue to develop the website and the information it contains to fully incorporate all of the required materials.

b. Create an Illegal Dumping Program

Illegal Dumping is often associated with stormwater pollution, and as-such Danville is required to implement a program to detect and address illegal dumping per the MS4 permit. Illegal dumping often occurs in the same areas of a city or town on a recurring basis. Creating a database and GIS map of illegal dumping locations can

facilitate an inspection schedule for these areas. Public education and information on reporting illegal dumping shall be included in the program.

- i. Danville's City Code currently prohibits illegal dumping, as well as littering. Both infractions are subject to fines. The City's website www.cityofdanville.org has a means of reporting illegal dumping. The button to report stormwater issues on the stormwater page is also noted as a means of reporting illegal dumping.

It may also be beneficial to offer additional public education through flyers and the city's website. Danville intends to create an illegal dumping flyer and/or webpage for public education about the risks and costs of illegal dumping. It will include information on how to report illegal dumping. We plan to highlight the stormwater reporting link currently on the website as well.

Outfall Inspection Form

Priority

#

Section 1: Background Data

Outfall ID: Approx. Location:	Discharges to:
Date:	Last Rainfall Time:
Inspector:	Inspector 2:
Temperature:	Rainfall:
Land Use in Drainage Area:	
Notes (e.g., origin of outfall, if known):	

Section 2: Outfall Description

Location	Material	Shape	Number	Size	Submerged
					In Water
					With Sediment
Flow Present?					
Flow Temp.					
Flow Amount					
Erosion					

Section 3: Physical Indicators for Flowing or Submerged Outfalls

Indicator	Description	Severity
Odor		
Color		
Turbidity		
Floatables		

Section 4: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Indicator	Description	Comments
Outfall Damage		
Deposits/Stains		
Abnormal Vegetation		
Poor Pool Quality		
Pipe Benthic Growth		

GIS Notes:

Maintenance Notes:

Standard Operating Procedure: Outfall Inspection

Purpose of the SOP:

This SOP provides a basic checklist for conducting storm drainage system outfall inspections utilizing the iPad.

Planning Considerations:

- Outfall inspections are to occur at each location twice each year – once during dry conditions (72 hours since rainfall) and once after a recent rainfall (1/2" or more rain within the last 24 hours).
- Be sure tablet is sufficiently charged before leaving the office.
- Consider grouping inspections located in close proximity.
- Be aware of easements to access outfalls.
- Expect most outfalls to be somewhat difficult to access. Woods, difficult terrain, private property and/or water-access only are to be expected.
- Do not enter private property without arranging permissions ahead of time.

Equipment List:

- PPE (Vest, boots, etc.)
- Outfall Inspection iPad
- Sample bottle
- Sampling Pole
- Disposable gloves
- Infrared thermometer
- Tape Measure
- Pruning Shears (for trimming briars, etc.)
- Machete (optional, but helpful)
- 5 gallon bucket
- Stop watch
- Hand wipes

Field Methods:

- Inspect outfall only if it is safe to do so. Be sure of footing, especially in wet conditions, look for poison ivy, etc.
- Open "Collector" App on the iPad. 
 - Open "Engineering – Storm Outfall inspections" map
 - Zoom to current location. Locate appropriate outfall dot. 
 - Click on outfall dot to open inspection form.
 - Click the edit button,  then "Edit".
 - While wearing gloves, collect a sample of any flow. Characterize the outfall by recording information in the Outfall Inspection Form.
 - Use the tape measure to verify pipe size.
 - Use the sample bottle to characterize visual and olfactory information.
 - Attempt to identify any dry weather flow.
 - Attempt to identify any unusual wet weather flow.
 - Use the 5 gallon bucket (or sample bottle as appropriate) and a timer to estimate flow rate.
 - Click "Update" when all criteria have been completed.
- Open "Photo Date Stamp" App on the iPad. 
 - Click "Take Photo".
 - Take 1 to 3 photos of the outfall and surrounding area, trying to capture the location and all notable criteria (physical condition of pipe, nearby erosion, characteristics of flow, etc.).

- Reopen “Collector” App, click on the outfall dot, click the edit button and “Edit”.
 - Click the Camera logo,  then “Add”, then “Choose From Library”.
 - Click “Camera Roll”, then select the appropriate photos. Then click “Done”.
 - Click “Update”.
- If the outfall dot is not in the correct location to accurately indicate the outfall location:
 - Click on the outfall dot.
 - Click the edit button, then “Edit”.
 - Click on the screen in the correct location to move the dot.
 - Click “Update”.
- If an outfall of 24” diameter or greater is found which is not in the GIS:
 - While standing at the appropriate location, click the “+” to “Collect a new feature”
 - Follow the monitoring criteria above.
 - Be sure to notify the GIS personnel of the new outfall and subsequent piping.
- Follow the procedures below if an illicit discharge or sanitary discharge is suspected.

Procedure for suspected sanitary discharge:

- Document observations on the Outfall Inspection Form
- Take photos
- Immediately Contact Construction & Maintenance Manager (Dave: 431-2395/260-3400); or PW Deputy Director (Ray: 431-3446/304-0830)
- Remind them to follow SOP for Sanitary Sewer Overflows. SSOs must be reported to IEPA within 24 hours.
- Notify Assistant City Engineer (Eric: 431-2259/474-5623) and/or Stormwater Engineer (Colleen: 431-3441/274-4647), as a matter of record.

Procedure for suspected illicit discharge:

- Document observations on the Outfall Inspection Form
- Take photos
- Visually inspect general area for possible sources.
- Notify SW Engineer (Colleen: 431-3441/274-4647) and Assistant City Engineer (Eric: 431-2259/474-5623).
- SW engineer or Assistant City Engineer shall report to Construction & Maintenance Manager or PW Deputy Director.
- Illicit Discharges shall be logged. Discharges shall be tracked upstream by PW until source can be found and removed.

Procedure for non-suspected discharge:

- Document observations on the Outfall Inspection Form
- Take photos
- If outfall flow appears to most likely be groundwater, report findings to Construction & Maintenance Manager as a matter of record. (Dave: druwe@cityofdanville.org.)

Acronyms Used In Inspection Form

RCP: reinforced concrete pipe

CMP: corrugated metal pipe

PVC: polyvinyl chloride

HDPE: high-density polyethylene

VC: vitrified clay