SUPPLEMENTAL PACKET

6-18-19 CC Mtg

Received:
March 20, 2018

Dear: Ron Moorse,

Please read this tonight to the Mayor and Council on our behalf.

Sandra and I have read the Packet provided to Council members for the Meeting tonight March 20th 2018. I have also read the most recent post of the Mayors Findings and conditions. I would like to ensure the council of several important items.

1. Our property on Odell is owned by us. A family member lives in the home as a resident of Afton. I understand the development approval and subsequent executed Final contracts/agreements allow the removal of the Home currently on the land. Approval of Afton Creek Preserve allows options that fulfill my Family needs in the event of house removal.
2. In addition: I have financial ability to perform the required Development improvements and funding items listed In your **Code sec. 12-78. 12-1473. 12-1474.**

We look forward to working with our developer JP. Bush Homes, The City Of Afton, and Minnesota Land Trust to create agreed upon contracts that allow the Development of our land. Afton Creek Preserve.

Sincerely

Will and Sandra Carlson

wsb

Memorandum

To: Nick Guilliams, WSB

From: Meghan Litsey, WSB

Date: June 18, 2019

Re: Afton Creek Preserve – Construction Stormwater Requirements

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Below is a summary of the construction stormwater requirements for the Afton Creek Preserve project in Afton, Minnesota.

Erosion Control Plans & Stormwater Pollution Prevention Plan (SWPPP)
Projects that disturb one or more acres of land are required to obtain a National Pollutant Discharge Elimination System (NPDES) Construction Stormwater (CSW) Permit from the Minnesota Pollution Control Agency (MPCA) (**Attachment 1**). The MPCA is a state agency that monitors environmental quality and regulations in Minnesota for various environmental service areas.

One of the conditions of the NPDES CSW Permit is to prepare a site-specific plan to manage stormwater and erosion during construction. This plan is called a Stormwater Pollution Prevention Plan (SWPPP) and it includes a combination of a narrative, plan sheets, and standard details. The NPDES CSW Permit outlines minimum requirements that must be included in a SWPPP, including best management practices for erosion control, sediment control, pollution prevention, permanent stormwater management, inspections, and maintenance. The person(s) who prepares the SWPPP must be trained and hold an active certification from the University of Minnesota.

During the plan review process for the Afton Creek Preserve Final Plat, the project's SWPPP and erosion control was reviewed on multiple occasions for conformance with the NPDES CSW Permit and City Code. Trained plan reviewers at WSB utilized checklists from the MPCA to ensure the plans met the construction stormwater requirements. In addition, it was verified that the SWPPP designer for the Afton Creek Preserve project had a current certification from the University of Minnesota.

Inspections & Maintenance
The contractor must ensure a trained person performs inspections once every seven days and within 24 hours of a half inch rain event in 24 hours to comply with the NPDES CSW Permit. All erosion and sediment control and pollution prevention management measures must be inspected. All inspections must be documented on an inspection form. If nonfunctional practices are identified during an inspection, they must be repaired, replaced, or supplemented by the end of the next business day after discovery. In addition, inactive, exposed soils must be stabilized as soon as possible but no later than seven days after inactivity.

The contractor has been submitting their weekly and rain event inspections to WSB since construction started. In addition, WSB provides oversight inspections on a weekly basis to monitor the performance of the project on behalf of the City. The purpose of WSB's environmental compliance inspections are to ensure the project is conforming to NPDES CSW Permit and City Code standards. All inspections are documented on an inspection form. If deficient items are discovered during the inspection, the inspector communicates these items to

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the contractor and the items are noted in the site inspection form. All site inspection forms are provided to the contractor within 24 hours of the inspection.

Non-Compliance & Enforcement Mechanisms
When a City staff person or their designee (i.e., WSB) identifies non-compliance on a construction site, the standard process for enforcement is to escalate the response when a contractor fails to respond in a timely manner. For example, deficient items are identified in the weekly inspection report first, and then communicated to the contractor. The contractor is given an opportunity to fix the deficient items in accordance with the timeframes specified in the NPDES CSW Permit. During the next scheduled inspection, if the deficient items have not been addressed, the enforcement sequence is initiated starting with a verbal warning, then written warning, and/or other enforcement allowed by City Code. The level of enforcement response depends on several factors, including:

- Severity of the violation: the duration, quality, and quantity of pollutants, and effect on public safety and the environment;
- The violator's knowledge (either negligent or intentional) of the regulations being violated;
- A history of violations and /or enforcement actions individual or contractor; and,
- The potential deterrent value of the enforcement action.

The following enforcement tools are specified in City Code:

- Section 1-13(c) - Voluntary Administrative Penalty. Process to create by resolution supplemental administrative penalties not specified in City Code, and in addition to the administrative penalty, to adopt a compliance plan to correct the situation (Sec. 1-13(c)(5)).

- Section 12-59 - Violations. The violation of any provision of this article or the violation of the conditions or provisions of any permit issued pursuant to this article shall be a misdemeanor and upon conviction thereof the violator shall be subject to punishment in accordance with Section 1-13. Unless otherwise provided, each act of violation and every day on which such violation occurs or continues constitutes a separate offense.

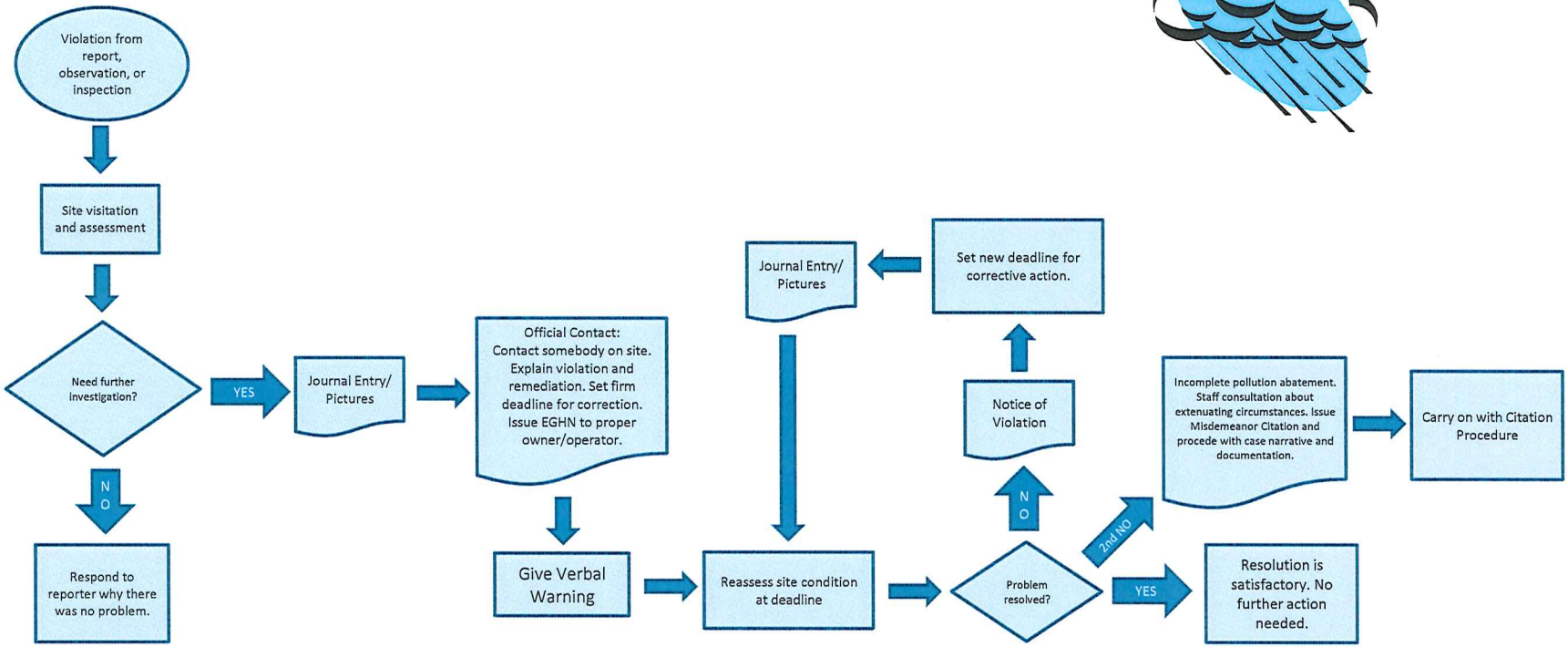
Recommendations & Conclusion
It is recommended that the City develop and implement a written enforcement response procedure to enforce and compel compliance with City Code related to construction site non-compliance. An enforcement response procedure identifies enforcement tools that are available to City staff if they observe noncompliance with City Code. The enforcement response procedure may identify what tools are available, who can use the enforcement tools, follow-up actions, how and when enforcement is escalated if a violation isn't corrected, and documentation requirements. An example of an enforcement response procedure for the City of Red Wing is attached (**Attachment 2**). Implementation of an enforcement response procedure will ensure a consistent response throughout the City and avoid confusion, delays and potential disputes over enforcement for stormwater pollution prevention.

Thank you for the opportunity to support the City of Afton with the environmental compliance oversight of the Afton Creek Preserve project. If you have any other questions or concerns, please contact me at 612-723-9166 or mlitsey@wsbeng.com.

Attachments

Attachment 1 MPCA Construction Stormwater Permit Overview
Attachment 2 City of Red Wing Enforcement Response Procedure

Stormwater Pollution Prevention Plan
Enforcement Response Procedures



City of RED WING

Enforcement response procedures are designed to discover and confront stormwater pollution violations in a systematic way in order to correct those violations and protect the environment. Many stormwater pollution violations occur because citizens are simply unaware of pollution prevention regulations; so, an Environmental Good Housekeeping Reminder serves to inform them about the rules and then require code compliance. Other violations are deemed more serious because they pose significant threats to stormwater due to the size and scope of those violations. Contractors, builders, and developers who disturb more than one acre of land, are highly regulated and require constant inspections for best management practices and required documentation.

According to the Red Wing City Code, stormwater pollution is a misdemeanor offence and it will be prosecuted if a pollution violation cannot or will not be corrected or resolved within a required period of time.

Construction Stormwater Permit overview

A technical summary of Minnesota's NPDES permit

This fact sheet provides summary information. Please review the NPDES/SDS Construction Stormwater General Permit for more detailed information.

Ecological harm

By following the terms and conditions of the construction stormwater permit, Minnesota's construction workers reduce the environmental pressure of earth-moving activities on Minnesota's water.

In days or weeks, land disturbing activities at construction sites has the potential to contribute more sediment to streams than is deposited naturally over several decades. The environmental damage is severe and often permanent. Polluted runoff clouds streams, harming or killing fish and other aquatic organisms. Sediment deposits accelerate filling-of lakes. Sediment also carries nutrients that cause excessive plant growth and algae that contribute to the eutrophication process. Increased volume of runoff caused by the creation of new impervious surfaces can cause severe erosion in receiving waters and may change the contours of a river and wipe out valuable habitats like gravel stream beds which are necessary for fish spawning. Other pollutants at construction sites such as concrete wash water, petroleum products, chemicals, construction materials and sewage may pose a risk to both surface and groundwater and need to be properly handled and stored.

Regulatory mandate

Minnesota's construction stormwater permit is an extension of the National Pollutant Discharge Elimination System (NPDES) Stormwater Program, which is part of the Federal Clean Water Act.

The NPDES Stormwater Program is a comprehensive national program for addressing polluted runoff. The U.S. Environmental Protection Agency (EPA) is ultimately responsible for the quality of the nation's water, but in Minnesota, the Minnesota Pollution Control Agency (MPCA) administers this federal program as well as the related State Disposal System (SDS) permit program. The states combined NPDES/SDS construction stormwater permit fulfills federal and state requirements by requiring permittees to control runoff.

Enforcement

The federal government requires NPDES permit coverage of construction sites that disturb one or more acres. Sites that lack permit coverage and/or fail to meet permit terms and conditions will be subject to MPCA enforcement action, civil penalties and/or criminal charges. Owners and operators of construction activity that fail to obtain permit coverage are open to third-party civil suits.

Application process

Prior to submitting an application, regulated parties must develop a complete and accurate Stormwater Pollution Prevention Plan (SWPPP) in accordance with Section 5 of the permit. The construction stormwater permit application must be submitted using the MPCA Online Services system along with electronic payment of the $400 application fee.

The application fee can be submitted online via credit card or e-check. Instructions for completing the application process can be found at the Steps to Construction site. Permit coverage is effective one business day after submitting a complete application. An authorized party, such as a consultant or legal counsel, may complete the application for the project owner. Both the owner and the contractor must be listed on the application.

If the applicant is unable to apply online due to lack of internet access or other reasons, contact the MPCA at 651-757-2119 or 800-657-3804 for assistance.

Projects that are not eligible for permit issuance in one day: For sites disturbing 50 acres or more where stormwater will discharge within one mile to special waters or to impaired waters, the application and SWPPP must be submitted for review at least 30 days prior to construction.

Special waters and impaired waters are described in Section 23 of the permit. Special waters include Outstanding Resource Value Waters (ORVW) such as calcareous fens, state and federally designated wild river segments, portions of the Mississippi River, trout lakes and trout streams. The permit also describes impaired waters as those waters identified as impaired under section 303 (d) of the Federal Clean Water Act and are impaired for at least one of four construction related impairments of phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen or aquatic biota (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment).

The MPCA has an online map tool that can be used to determine if the site is within one mile of a special or impaired water. The distance is measured using a straight line (aerial radius measurement) not the flow distance from the closest project discharge point to the nearest edge of the water body.

Stormwater Pollution Prevention Plan requirements

Your SWPPP must include a description of all erosion prevention and sediment control Best Management Practices (BMPs) to be utilized on the site to control sediment and other pollutant discharges from the site. The SWPPP must be prepared by an individual who is knowledgeable and trained in the preparation of SWPPPs. The SWPPP must be a combination of narrative, plan sheets and standard details that include the following components:

- A description of the construction activity and potential for sediment and other potential pollutant discharges from the site.
- The identity of an individual(s) (once known) to oversee BMP implementation, installation and conduct inspection and maintenance activities.
- Training documentation for all individuals required to be trained in associated duties in relation to the SWPPP.
- Stormwater design specifications and calculations for stormwater management systems, including the number of acres of existing and new impervious surfaces.
- Timing of installation for all erosion prevention and sediment control BMPs and permanent stormwater management systems.
- Location and type of all BMPs to be utilized at the site along with procedures to establish additional BMPs as necessary.
- Estimated quantities of all BMPs to be used for the life of the project.
- A site map showing both the existing and final grades, including direction of flow and pre and post drainage area divides. The site map must also include locations of steep slopes, impervious surfaces, soil types, and potential pollutant-generating activities (such as building products, pesticides, herbicides, fertilizer, treatment chemicals, hazardous materials, solid waste, portable toilets, etc.).
- Areas not to be disturbed on the site, including the location of any required buffer zones.
- Locations of areas to be phased to minimize duration of exposed soils.

- Maps showing the locations of all surface waters, including wetlands, stormwater ponds or basins within one mile of the site. The site map must also show areas of the site that will drain to a public water the Department of Natural Resources (DNR) has promulgated "work in water restrictions" for fish spawning timeframes.
- A determination whether surface waters within one mile of the site are special or impaired for one of the construction-related parameters.
- Final stabilization methods for exposed soils.
- The following factors must be accounted for in design of BMPs:
  - Amount, frequency, intensity and duration of precipitation.
  - Stormwater runoff and run-on, including expected flow from impervious surfaces, slopes and site drainage features.
  - How flow rate and volume of channelized flow will be managed to minimize erosion at outlets and downstream erosion.
  - Range of soil particles expected at the site.
- Methods to minimize soil compaction and preserve top soil at the site.
- Plans for proper use of sediment treatment chemicals (polymers, flocculants, etc.).
- Documentation why certain design requirements or SWPPP components are not feasible (as allowed in the permit) and the method that will be substituted to comply with permit.
- Stormwater pollution mitigation measures to be utilized as a result of an environmental review.
- Identify temporary sediment basins, if more than ten acres are disturbed and drain to a single point of discharge.
- Identify dewatering and basin draining practices.
- Identify inspection and maintenance practices.
- Identify pollution prevention management measures.
- Include a strategy for retaining records.
- Include standard plates and specifications of BMPs.

Stormwater Pollution Prevention Plan amendments

Amendments to your SWPPP are required when:

- There is a change in design, construction, operation, maintenance, weather or seasonal conditions that effect potential discharge of pollutants.
- Inspections indicate BMP ineffectiveness.
- General objectives for minimizing pollutant discharges or terms and conditions of permit are not being met.
- The MPCA determines that the project's discharges may contribute to non-attainment of a water quality standard, does not meet requirements for impaired waters, Total Maximum Daily Loads with implementation requirements or that the SWPPP is not meeting one of the above determinations.

Permanent stormwater management system

Previous pavers

When a project replaces vegetation or other pervious surfaces with one or more acres of cumulative impervious surface, one inch of runoff from the new impervious surfaces must be retained on site through infiltration or other volume reduction methods.

If infiltration is not allowed due to wet soils, bedrock, industrial contaminates, karst or other prohibitions listed in the permit, other methods of stormwater treatment must be provided such as:

- Wet sedimentation basins
- Filtration systems
- Regional ponds

The permanent stormwater management system chosen for the project must be designed and constructed according to the parameters listed in the permit.

Best Management Practices

Erosion prevention practices

The permittee must take action to stabilize exposed soils, including soil stockpiles, whenever it is known that land disturbing activity on any portion of the site will cease for 14 days or more. The stabilization must be initiated immediately and completed within 14 days. If the site has exposed soils that drain into a public water with Minnesota DNR "work in water restrictions" due to fish spawning time frames, the soils in that portion of the site that drain to and are within 200 feet of the water edge must be stabilized within 24 hours. Examples of soil stabilization include the following:

- Mulches
- Hydraulic soil stabilizers
- Erosion blankets
- Rip rap
- Sod

Other required erosion prevention practices:

- The last 200 feet of normal wetted perimeters of ditches or swales must be stabilized within 24 hours of connecting to a property edge or point of discharge. The remainder of the ditch or swale must be stabilized within the 14-day time frame. Acceptable methods for stabilizing ditches and swales include the following:
  - Erosion control blankets or mats
  - Rip rap
  - Other material suitable for concentrated flow areas
  - Mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practice is not an acceptable stabilization method in these areas.
- Pipe outlets require energy dissipation, such as rip rap, splash pads or other suitable material to prevent scour and must be installed within 24 hours of connection to a surface water.
- An effort must be made to direct stormwater runoff to vegetated areas of the site.

Sediment control practices

Sediment control practices must minimize sediment from entering surface waters, curb and gutter systems, and storm sewer inlets. Regulated parties choose which practices are best for specific sites and practices must be installed according to permit timelines. Sediment controls to be used at the site include:

- Down gradient perimeter control established below the planned land disturbance and up gradient of vegetative buffers before work begins. Floating curtains are not an acceptable method of perimeter control near surface waters unless the work is on the shoreline or below the water line prohibiting the use of standard perimeter control and the floating curtain is located in the water as close to the shore as possible.
- Storm drain inlet protection.
- Sediment controls installed at the perimeter of temporary soil stockpiles.
- BMPs, such as stone pads or wash racks installed at construction exits to prevent vehicle tracking.
- Temporary sediment basins where ten or more acres of exposed soil drain to a common point on the site.
- Methods to minimize soil compaction.
- Maintaining a 50-foot natural buffer down gradient of the site or redundant sediment controls if buffer is not feasible, when the construction is within 50 feet of a surface water.
- Use of sediment treatment chemicals, such as flocculants and polymers, must comply with the following:
  - The chemical may only be applied to a sediment control system that provides filtration or settlement prior to discharge.
  - The chemical must be selected based on soil type.
  - The chemical must be used according to the manufacturer specifications and accepted engineering practices.

For sites within one mile of special or impaired waters, additional BMPs are required.

Additional BMPs are listed in Section 23 for the specific water of concern. Dependent upon the water listed these BMPs may include:

- Temporary erosion protection or permanent cover over exposed soil must be initiated immediately and completed no later than seven days after an area is no longer being worked.
- Temporary sediment basins are required where five or more acres of exposed soil drain to a single point.
- 100 linear feet permanent buffer zone must be maintained when the site is near a special water unless encroachment is necessary to complete the construction. In that case, redundant BMPs are required to minimize impacts.
- The permanent stormwater management system must utilize temperature controls when the receiving water is a trout stream such as infiltration, filtration, shading, filtered bottom withdrawal, or other volume reduction practice.

Dewatering and basin draining

Dewatering and basin draining must discharge to a temporary or permanent sedimentation basin whenever possible. Dewatering must:

- Prevent erosion and scour at discharge points through the use of an energy dissipation device.
- Use an oil-water separator if the dewatering water contains oil or grease.
- Haul backwash water away for disposal if filters are used with backwash water. Otherwise, return the backwash water into the site in a manner that does not cause erosion.
- Avoid nuisance conditions in receiving waters.
- Not inundate downstream wetlands.

Inspections and maintenance

A trained individual must inspect the construction site at least once every seven days during active construction and with 24 hours of an half inch rainfall event. A written record must be kept of each inspection. The inspection frequency may be reduced to once per month on areas of the site with permanent cover. If there is no active construction at the site and permanent cover is in place, monthly inspections may cease after 12 months. Inspections may cease during frozen conditions when construction has stopped, but must resume within 24 hours of runoff or if construction begins again.

Maintenance activities to repair or replace deficient BMPs found during inspection include:

- Inspections of all erosion prevention and sediment control measures to ensure integrity and effectiveness.
- Repairing, replacing, or enhancing nonfunctional BMPs by the end of the next business day.
- Draining and removing sediment from basins when sediment reaches half the storage volume within 72 hours of discovery.
- Inspecting surface waters, drainage ditches and conveyance systems for sediment and removing deposits within seven days.
- Inspecting streets and vehicle exits and removing tracked sediment within 24 hours.
- Inspecting infiltration areas to ensure no construction sediment is reaching the infiltration area and that equipment is not being driven across the areas.

Pollution prevention management

Pollution prevention management measures include the storage, handling and disposal of construction products, materials and wastes to minimize exposure to stormwater and prevent polluted runoff. The following pollution prevention measures must be implemented:

- Provide covers for building products and landscape materials that have the potential to leach pollutants.
- Place pesticides, fertilizer and treatment chemicals under cover.
- Keep hazardous materials such as fuels, hydraulic fluid, solvents, wood preservatives, additives, curing compounds, acids, etc. in sealed containers and provide secondary containment as applicable.
- Collect and properly dispose of solid waste.
- Secure portable toilets and properly dispose of sanitary waste.
- Contain vehicle washing to a specific area and collect runoff for proper disposal.
- Contain all liquid and solid wastes generated from washouts of concrete, stucco, paint, form release oils, curing compounds, and other construction materials from contacting the ground, and dispose of the wastes properly.

Permit termination conditions

The permit may be terminated when:

- All soil disturbing activities have been completed.
- A uniform perennial vegetative cover of at least 70 percent of the expected final vegetative growth density or other permanent cover has been established over the entire pervious surfaces.
- The permanent stormwater management system has been constructed and is operational.
- Sediment has been removed from basins, ditches and other conveyance systems.
- Temporary synthetic and structural BMPs have been removed.
- Construction on agricultural land has been returned to its original agricultural use.
- For residential lots, construction is complete and temporary erosion protection is in place and the MPCA fact sheet, *Homeowner Fact Sheet*, has been distributed to the new homeowners.

Discharges to wetlands

Permittees must follow a wetland mitigation sequence if the project's stormwater discharge has the potential for adversely impacting a wetland (for example, excavating, filling, draining or inundating a wetland, including use of a wetland as a stormwater management system). Potential adverse impacts may be addressed by:

- Obtaining permits or other approvals from an official statewide wetland permitting program (United States Army Corps of Engineers, DNR, or Wetland Conservation Act).
- If there are impacts from the project that are not addressed in one of the permits listed above, follow the appropriate measures to avoid, minimize or mitigate all adverse impacts as listed in Section 22.

Special situations

Minnesota's construction stormwater permit does not replace or satisfy any requirements dealing with environmental review, environmental impact statements, environmental worksheets, federal environmental review, endangered or threatened species, and historic places or archeological sites. The permittee must be in compliance with the requirements of these acts.

Resources

MPCA Stormwater Compliance assistance Tool Kit for Small Construction Operators
www.pca.state.mn.us/publications/wq-strm2-09.pdf

MPCA Industrial Stormwater Best Management Practices Guidebook
www.pca.state.mn.us/water/stormwater/stormwater-manual.html

MPCA Protecting Water Quality in Urban Areas
www.pca.state.mn.us/water/pubs/sw-bmpmanual.html

Contact us

For more information, call the MPCA Stormwater Hotline at 651-757-2119 or 800-657-3804.

For the status of your application, go to: http://cf.pca.state.mn.us/water/stormwater/csw/search.cfm