MINNESOTA POLLUTION CONTROL AGENCY

National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS)

MN0061263

Permittee: City of St. Paul, herein after the "Permittee"

Facility name: St. Paul Municipal Storm Water

Receiving water: Waterbodies within and adjacent to the City of St. Paul

City: St. Paul **County:** Ramsey

Issuance date: July 12, 2018

Expiration date: July 11, 2023

The State of Minnesota, on behalf of its citizens through the Minnesota Pollution Control Agency (MPCA/Agency), authorizes the Permittee to operate a disposal system at the facility named above in accordance with the requirements of this permit.

The goal of this permit is to reduce pollutant levels in point source discharges and protect water quality in accordance with the U.S. Clean Water Act, Minnesota statues and rules, and federal laws and regulations.

This permit is effective on the issuance date identified above. This permit expires at midnight on the expiration date identified above.

Signature: Duane Duncanson

This document has been electronically signed.

Duane Duncanson *for the* Minnesota Pollution Control Agency
Supervisor, Municipal Stormwater Unit
Stormwater Section
Municipal Division

If you have questions about this permit, including specific permit requirements, permit reporting, or permit compliance status, please contact the Minnesota Pollution Control Agency at:

Municipal Stormwater Program
Municipal Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194
Telephone: 651-296-6300 or toll free in Minnesota: 800-657-3864

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PART I. AUTHORIZATION UNDER THIS PERMIT

A. ELIGIBILITY

To be eligible for authorization to **discharge stormwater** under this permit, the applicant must be an **owner** and/or **operator** (**owner/operator**) of a **large municipal separate storm sewer system** (**MS4**) as defined in 40 CFR § 122.26(b)(4).

1. Authorized **Stormwater** Discharges

   This permit authorizes **stormwater discharge**s from the **MS4**.

2. Authorized Non-**Stormwater** Discharges

   The following categories of **non-stormwater discharge**s or flows are authorized under this permit to enter the **Permittee**'s **MS4** only if the **Permittee** does not identify them as significant contributors of pollutants (i.e., **illicit discharge**s), in which case the **discharge**s or flows must be addressed in the **Permittee**'s **Stormwater Management Program** (**SWMP**): water line flushing, landscape irrigation, diverted stream flows, rising groundwaters, uncontaminated groundwater infiltration (as defined at 40 CFR § 35.2005[b][20]), uncontaminated pumped groundwater, **discharge**s from potable water sources, foundation drains, air conditioning condensation, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and **wetlands**, dechlorinated swimming pool **discharge**s, street wash water, and **discharge**s of flows from firefighting activities.

B. LIMITATIONS ON AUTHORIZATION

The following **discharge**s or activities are not authorized by this permit:

1. **Non-stormwater discharge**s, except those authorized in Part I.A.2.

2. **Discharge**s of **stormwater** to the **MS4** from activities requiring a separate NPDES/SDS permit. This permit does not replace or satisfy any other permitting requirements.

3. **Discharge**s of **stormwater** to the **MS4** from any other entity located in the drainage area or outside the drainage area. Only the **Permittee**'s **MS4** and the portions of the storm sewer system under the **Permittee**'s operational control are authorized by this permit.

4. This permit does not replace or satisfy any environmental review requirements, including those under the Minnesota Environmental Policy Act (Minn. Stat. § 116D), or the National Environmental Policy Act (42 U.S.C. §§ 4321 – 4370f).

5. This permit does not replace or satisfy any review requirements for endangered or threatened species, from new **discharge**s that adversely impact or contribute to adverse impacts on a listed endangered or threatened species, or adversely modify a designated critical habitat.

6. This permit does not replace or satisfy any review requirements for historic places or archeological sites, from new **discharge**s which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered archeological sites.

7. This permit does not authorize **discharge**s to **wetlands** unless the **Permittee** is in compliance with the requirements of Minn. R. 7050.0186.

C. PERMIT AUTHORIZATION

For an applicant to be authorized to **discharge stormwater** from a **large MS4** under this permit the **Commissioner** will communicate to the **Permittee** as to whether the permit should be issued or denied in accordance with Minn. R. 7001. Upon receipt of written notification from the **Commissioner** of permit coverage, the **Permittee** is authorized to **discharge stormwater** from the **large MS4** under the terms and conditions of this permit.

D. RIGHTS AND RESPONSIBILITIES

1. The **Commissioner** may modify this permit or issue other permits, in accordance with Minn. R. 7001, to include more stringent effluent limitations or permit requirements that modify or are in addition to the Minimum Control Measures (MCMs) in Part III.C. of this permit, or both. Modifications may be based on the **Commissioner**'s determination that such modifications are needed to protect water quality.

2. The **Permittee** must manage, operate, and maintain the storm sewer system and areas drained by the storm sewer system within the **Permittee**'s jurisdiction to **reduce** the **discharge** of pollutants to the **Maximum Extent Practicable** (**MEP**). Management may consist of a combination of **Best Management Practices** (**BMP**s), education, other control techniques, system design and engineering methods, and such other provisions as the **Permittee** and/or **Commissioner** determine to be appropriate.

PART II. APPLICATION REQUIREMENTS

A. APPLICATION FOR REAUTHORIZATION

1. The **Permittee** must submit a written application for reauthorization at least 180 days before the expiration date of this permit (Minn. R. 7001.0040, subp. 3).

2. If the **Permittee** has submitted a timely application for permit reauthorization, the **Permittee** must continue to conduct the activities authorized by this permit, in compliance with the requirements of this permit, until the **Agency** takes final action on the application, unless the **Agency** determines one of the following:

   a. The **Permittee** is not in substantial compliance with the requirements of this permit, or with a stipulation agreement or compliance schedule designed to bring the **Permittee** into compliance with this permit.

   b. The **Agency**, as a result of an action or failure to act by the **Permittee**, has been unable to take final action on the application on or before the expiration date of the permit.

   c. The **Permittee** has submitted an application with major deficiencies or has failed to properly supplement the application in a timely manner after being informed of deficiencies (Minn. R. 7001.0160).

3. The **Permittee** must submit with an application for reauthorization a revised **SWMP**.

B. DISCHARGES TO IMPAIRED WATERS WITH A U.S. ENVIRONMENTAL PROTECTION AGENCY (USEPA)-APPROVED TOTAL MAXIMUM DAILY LOAD (TMDL) THAT INCLUDES AN APPLICABLE WASTE LOAD ALLOCATION (WLA).

For each **applicable WLA** approved prior to the submittal of the application for reauthorization, the **Permittee** must submit the following with an application for reauthorization:

1. **TMDL** project name(s).

2. Numeric **WLA**(s), including units.

3. Type of **WLA** (i.e., categorical or individual).

4. Pollutant(s) of concern.

5. Applicable flow data specific to each **applicable WLA**.

6. For each **applicable WLA** not met at the time of application, a compliance schedule is required. Compliance schedules can be developed to include multiple **applicable WLA**s and must include:

   a. Interim milestones, expressed as **BMP**s or progress toward implementation of **BMP**s to be achieved during the permit term.

   b. Dates for implementation of interim milestones.

   c. Strategies for continued **BMP** implementation beyond the permit term.

d. Target dates the **applicable WLA**(s) will be achieved.

7. For each **applicable WLA** the **Permittee** is reasonably confident is being met at the time of application, the **Permittee** must provide the following documentation:

   a. Implemented **BMP**s used to meet each **applicable WLA**.

   b. A narrative describing the **Permittee**'s strategy for long-term continuation of meeting each **applicable WLA**.

C. ANTI-DEGRADATION ASSESSMENT

The **Permittee** must submit with an application for reauthorization, data and information requested by the **Commissioner** for an anti-degradation assessment of impacts from **stormwater** runoff in accordance with Minn. R. 7050.0290, subp. 2.

D. SUBMITTING THE APPLICATION FOR REAUTHORIZATION

The **Permittee** must use an electronic submittal process, when provided by the **Agency**, for submitting an application for reauthorization developed in accordance with Part II.A. – C. of this permit. When submitting an application electronically is not possible, the **Permittee** must use the following mailing address:

Supervisor, Municipal Stormwater Unit
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

E. APPLICATION FOR REAUTHORIZATION RECORD RETENTION

The applicant must retain copies of the application for reauthorization, all data and information used by the applicant to complete the application, and any additional information requested by the **Commissioner** during the review of the application, for a period of at least three years beyond the date of permit expiration. This period is automatically extended during the course of an unresolved enforcement action regarding the **MS4** or as requested by the **Commissioner**.

PART III. STORMWATER MANAGEMENT PROGRAM (SWMP)

The **Permittee** must continue to develop, implement, and enforce a **SWMP** designed to **reduce** the **discharge** of pollutants from the **MS4** to the **Maximum Extent Practicable** (**MEP**), to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act and the conditions of this permit. The **SWMP** is an enforceable part of the permit.

The **SWMP** must utilize an adaptive management strategy by which the **Permittee** continuously monitors, analyzes, and adjusts the **SWMP** to achieve pollutant reductions to the **MEP**. The **SWMP** must include the Minimum Control Measures (described in Part III.C.1. – 8) and must conform with the requirements of Part III.A. – E. The **SWMP** must consist of the following:

A. REGULATORY MECHANISM(S)

To the extent allowable under state, tribal or local law, the **Permittee** must develop, implement, and enforce a regulatory mechanism(s) to meet the terms and conditions of Part III.C.3. – 5. A regulatory mechanism(s) for the purposes of this permit may consist of contract language(s), ordinance(s), permit(s), standard(s), or any other mechanism(s), that will be enforced by the **Permittee**.

B. ENFORCEMENT RESPONSE PROCEDURES (ERPs)

1. The **Permittee** must develop and implement written ERPs to enforce and compel compliance with the regulatory mechanism(s) described in Part III.A.

2. Enforcement conducted by the **Permittee** pursuant to the ERPs must be documented and include, at a minimum, the following:

    a. Name of the **person** responsible for violating the terms and conditions of the **Permittee**'s regulatory mechanism(s).

    b. Date(s) and location(s) of the observed violation(s).

    c. Description of the violation(s), including reference(s) to relevant regulatory mechanism(s).

    d. Corrective action(s), including a completion schedule, issued by the **Permittee**.

    e. Date(s) and type(s) of enforcement used to compel compliance (e.g., verbal warning, written notice, citation, stop work order, withholding of local authorizations, etc.).

    f. Referrals to other regulatory organizations, if any.

    g. Date(s) violation(s) resolved.

C. MINIMUM CONTROL MEASURES (MCMs)

The MCMs listed below must be included in the **SWMP**. The **Permittee** must define appropriate **BMP**s and measurable goals for each MCM.

1. Public Education and Outreach

The **Permittee** must continue to implement a public education and outreach program of appropriate **BMP**s directed at, but not limited to: residents, developers, businesses, elected officials, and policy makers. **BMP**s must take into account known water quality impairments, community concerns, and the public's knowledge of **stormwater** runoff impacts. At a minimum, the **Permittee** must:

a. Implement the following education and outreach activities. The activities below must be implemented at least once throughout the permit term and the **Permittee** may prioritize the number of activities implemented during each year of the permit term.

(1) A multi-lingual program for residents and businesses to increase the level of awareness about **stormwater** runoff impacts to **receiving water**s. This activity must utilize a variety of communication tools and methods to reach the target audiences and inform them of strategies to **reduce** pollutants in **stormwater** runoff.

(2) Educate the public, businesses, and commercial applicators on the proper application of pesticides, herbicides, and fertilizers and the benefits of retaining grass clippings and leaf litter on lawn surfaces.

(3) Educate the public on proper pet waste disposal.

(4) Educate the public and commercial applicators on the proper management and application of de-icing and anti-icing compounds for winter maintenance.

(5) Educate developers and contractors on construction site and post-construction **stormwater** management **BMP** design, construction, and maintenance methods.

(6) Educate the public about **impaired water**s within the jurisdiction and the **TMDL**s developed to address the impairments.

b. Develop and implement an education and outreach work plan, included in the **SWMP**, that consists of the following:

(1) Specific activities and timelines for each of the topics in Part III.C.1.a.(1) – (6).

(2) Target audiences for each activity where the audience has not been identified in Part III.C.1.a.(1) – (6).

(3) Measurable goals for each activity and target audience. Measurable goals must be stated in terms of increased awareness, increased understanding, acquired skills, and/or desired changes in behavior.

(4) A description of coordination with other **stormwater** education and outreach programs being implemented by other organizations, if applicable. Include a list of formal agreements or partnerships describing the roles performed by the other organizations on behalf of the **Permittee**.

(5) An annual evaluation to measure the extent to which measurable goals for each activity and target audience are attained.

(6) The name or title of the municipal staff responsible for work plan implementation.

c. Maintain documentation of the following information:

(1) All information required under Part III.C.1.b.

(2) Any modifications made to the program as a result of the annual evaluation under Part III.C.1.b.(5).

(3) Activities held, including dates, to reach measurable goals described in Part III.C.1.b.(3).

(4) Quantities and descriptions of educational materials distributed, including dates distributed.

2. Public Participation and Involvement

The **Permittee** must revise their current program and continue to implement a public participation and involvement program to solicit public input on the **SWMP**. At a minimum, the **Permittee** must:

a. Hold at least one public meeting per year for the public to provide input on the adequacy of the **SWMP** and the annual report. The **Permittee** must hold the public meeting prior to the submittal of the annual report to the **Commissioner**. The meeting and notice must include the following information:

(1) The public meeting must be held within the jurisdiction of the **Permittee**.

(2) The **Permittee** must prepare and publish a notice of the public meeting at least 30 days before the meeting. The notice of the public meeting must include the following information:

(a) A reference to the **SWMP**, the annual report, and the proposed modifications to the **SWMP**.

(b) The date, time, and location of the public meeting.

(c) A description of the manner in which the public meeting will be conducted and information about where a copy of the **SWMP** and annual report are available for public review.

(3) The **Permittee** must publish the notice in a newspaper or similar publication of general circulation in the vicinity of the **Permittee**'s jurisdiction. A copy of the notice must be made available to the following: the **Agency Commissioner**, appropriate county officials, any governmental entities that have jurisdiction over activities that directly or indirectly relate to **stormwater** management in the **Permittee**'s jurisdiction, and all other **person**s who have requested that they be informed of public meetings regarding the **SWMP** and annual report.

b. Provide access to the following **stormwater**-related public documents on the **Permittee**'s website:

(1) Current Phase I **MS4** individual permit.

(2) Current **SWMP**.

(3) Current annual report.

(4) Current **stormwater** runoff monitoring and analysis report.

c. Collect public input on the adequacy of the **SWMP**, including input from the public meeting. The **Permittee** must provide the public a reasonable opportunity to make oral statements concerning the **SWMP**.

d. Consider the public input received on the **SWMP** and make appropriate adjustments.

e. Include a formal resolution from the **Permittee**'s governing body adopting the annual report and the **SWMP** with the annual report.

f. Maintain documentation of the following information:

(1) All relevant written input submitted by **person**s regarding the **SWMP**.

(2) All responses from the **Permittee** to written input received regarding the **SWMP**, including any modifications made to the **SWMP** as a result of the written input received.

(3) Date(s) and location(s) of events held for purposes of compliance with this requirement.

(4) Notices provided to the public of any events scheduled to meet this requirement, including any electronic correspondence (e.g., website, e-mail distribution lists, notices, etc.).

3. **Illicit Discharge** Detection and Elimination (IDDE)

The **Permittee** must continue to implement and enforce a program to detect and eliminate **illicit discharge**s as defined in 40 CFR § 122.26(b)(2). To the **MEP**, the **Permittee** must minimize any adverse impact to **receiving water**s from all unauthorized **discharge**s, whether random, frequent, infrequent, accidental or otherwise consisting of pathogens, nutrients, oil, toxic pollutants or other hazardous substances consistent with Minn. Stat. §115.061 and 40 CFR pts. 110 and 116. This requirement applies to **discharge**s to the storm sewer system within the **Permittee**'s jurisdiction including physical connections. The **Permittee** must also select and implement a program of appropriate **BMP**s and measurable goals for this MCM. At a minimum, the **Permittee** must:

a. Update an electronic inventory and map of the storm sewer system, identifying:

(1) **Receiving water**s.

(2) **Structural stormwater BMP**s (except catch basins and storm drain inlets without sumps), including:

(a) The size of the subwatershed area draining to the **structural stormwater BMP**.

(b) The design capacity, estimated design capacity or size of the **structural stormwater BMP**.

(3) Land use types.

(4) All **pipe**s, ditches and swales, including **stormwater** flow direction. Catch basin lead **pipe**s must be added, when applicable.

(5) **Permittee**-owned facilities.

(6) **Outfalls**, including:

(a) **Outfall** identification number.

(b) Geographic coordinate of **outfall** location.

(c) Size of **outfall pipe**.

(d) Size of the subwatershed area draining to each **outfall**.

(e) Percent of **impervious surface**s in the subwatershed area draining to each **outfall**.

(f) The number and type of **structural stormwater BMP**s in the subwatershed area that drains to each **outfall**.

(7) **Stormwater** inflows from other **MS4**s.

b. Effectively prohibit, through ordinance or **other regulatory mechanism** and appropriate ERPs, **illicit discharge**s into the **MS4**.

c. Continue to develop and implement the following processes and procedures:

(1) Receive, track, and investigate complaints of **illicit discharge**s including goals for responding to and eliminating **illicit discharge**s.

(2) Identify the source of the **illicit discharge**s.

(3) Enforce violations of prohibitions on **illicit discharge**s.

(4) Limit infiltration of seepage from municipal sanitary sewers to the **MS4**.

d. Continue to develop and implement a dry weather field screening program to detect and eliminate **illicit discharge**s (except non-**stormwater discharge**s as identified in Part I.A.2.), including illegal dumping, to the system. The field screening program must include:

(1) Written procedures that describe how the **Permittee** will prioritize and investigate portions of the **MS4** where there is a reasonable potential to contain **illicit discharge**s or other sources of **illicit discharge**s. The **Permittee** must prioritize investigations based on the results of field screening, the presence of potential sources of illicit **discharge**s in the geographic area drained by that portion of the **MS4**, history, land use, sanitary sewer system, proximity to sensitive waters and other appropriate information.

(2) Areas or locations to be evaluated.

(3) A schedule for the field screening activities.

(4) Pollutants of interest.

(5) Evaluation procedures including non-sampling evaluation (e.g., visual observations, odors, etc.).

(6) Sampling procedures.

(7) Record keeping.

(8) Notification to the Department of Public Safety Duty Officer as required in Minn. Stat. § 115.061.

(9) The dry weather field screening may be implemented in conjunction with the **outfall** inspection and monitoring programs required by Part III.C.6.e(2) as well as during routine maintenance activities performed in areas included in the **Permittee**'s jurisdiction.

(10) Implementation of enforcement response procedures when **illicit discharge**s are discovered.

e. Continue to implement an education and outreach program for municipal staff, the public, businesses, and industry regarding **illicit discharge**s and improper disposal of waste, including:

(1) Communication and outreach to inform the public, municipal employees, and businesses about the following topics:

(a) Identifying **illicit discharge**s and illicit connections to catch basins, ditches, swales and **structural stormwater BMP**s.

(b) Hazards associated with **illicit discharge**s and illicit connections to the **MS4**.

(c) Reporting **illicit discharge**s and illicit connections to the **Permittee**.

(d) Preventing **illicit discharge**s and illicit connections to the **MS4**.

(e) Containment and response to **illicit discharge**s and spills that may **discharge** to the **MS4**.

(2) Written procedures to promote, publicize, and facilitate public reporting of **illicit discharge**s or water quality impacts associated with **discharge**s into or from the **MS4**.

(3) A central contact, including a phone number for complaints and spill reporting.

(4) The responsibility for municipal staff to notify the Department of Public Safety Duty Officer as required in this permit and the internal procedures for other municipal staff to respond and contain **illicit discharge**s and spills.

f. Implement the following measures for hazardous waste and other industrial facilities:

(1) Maintain and continue to develop an inventory of industrial, commercial, or institutional facilities that **discharge** any flow other than **stormwater** to the **MS4**. The inventory must include the name, location, discharge location to the **MS4**, the receiving water, **discharge** description, and any permit issued for the **discharge**. The **Agency** will provide a list of permitted facilities to the **Permittee** upon request.

(2) A program that identifies non-NPDES permitted **discharge**s from industrial facilities the **Permittee** determines are contributing a substantial pollutant loading to the **MS4**, including:

(a) **Stormwater hotspot**s, to the extent possible, using industrial/commercial **stormwater** risk factors and input from Ramsey County Environmental Health and St. Paul Safety & Inspections to identify these **stormwater hotspot**s and establish priorities.

(b) Municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

(3) Written procedures for addressing non-NPDES permitted **discharge**s from industrial facilities the **Permittee** determines are contributing a substantial pollutant loading to the **MS4**, including:

(a) Inspecting the facilities.

(b) Monitoring the facilities' **illicit discharge**s.

(c) Implementing **BMP**s for **illicit discharge**s associated with the **stormwater hotspot**s and priority industrial facilities identified in Part III.C.3.f.(2).

g. Maintain documentation of the following information:

(1) Date(s) and location(s) of illicit discharge inspections conducted.

(2) Reports of alleged **illicit discharge**s received, including date(s) of the report(s), and any follow-up action(s) taken by the **Permittee**.

(3) Date(s) of discovery of all **illicit discharge**s.

(4) Identification of **outfall**s, or other areas, where **illicit discharges** have been discovered.

(5) Sources (including a description and the responsible party) of **illicit discharges** (if known).

(6) Action(s) taken by the **Permittee**, including date(s), to address discovered **illicit discharges**.

4. Construction Site **Stormwater** Runoff Control

Continue to develop, implement and enforce a construction site **stormwater** runoff control program that **reduce**s pollutants in **stormwater** runoff to the **MS4** from **construction activity** with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger **common plan of development or sale**, that occurs within the **Permittee**'s jurisdiction. The program must incorporate the following components:

a. Regulatory mechanism(s)

A regulatory mechanism(s) that establishes requirements for erosion, sediment, and waste controls that is at least as stringent as the **Agency**'s general permit to *Discharge Stormwater Associated with Construction Activity No. MN R100001* (as of the effective date of this permit). If the **Agency**'s general permit to *Discharge Stormwater Associated with Construction Activity No. MN R100001* is reissued, the **Permittee** must revise their regulatory mechanism(s), if necessary, within six months of the issuance date of that permit, to be at least as stringent as the erosion, sediment, and waste controls required by that permit. The regulatory mechanism(s) must include the following:

(1) **Owner**s and **operator**s of **construction activity** develop site plans that must be submitted to the **Permittee** for review and approval, prior to the start of **construction activity**. **Stormwater** runoff controls described in site plans must be regularly updated by **owner**s and **operator**s during active **construction activity**.

(2) A requirement for site plans to incorporate erosion, sediment, and waste controls as specified in the **Agency**'s general permit to *Discharge Stormwater Associated with Construction Activity No. MN R100001*. The regulatory mechanism(s) must require that site plans incorporate the following categories of erosion, sediment, and waste controls as described in the above referenced permit:

(a) **BMP**s to minimize erosion.

(b) **BMP**s to minimize the **discharge** of sediment and other pollutants.

(c) **BMP**s for dewatering activities.

(d) Site inspections and records of rainfall events.

(e) **BMP** maintenance.

(f) Management of solid and hazardous wastes on each project site.

(g) Final stabilization upon the completion of **construction activity**, including the use of perennial vegetative cover on all exposed soils or other equivalent means.

(h) Criteria for the use of temporary sediment basins.

b. Site plan review

The program must include written procedures for site plan reviews conducted by the **Permittee** prior to the start of **construction activity**, to ensure compliance with the regulatory mechanism(s). The site plan review procedures must include notification to **owner**s and **operator**s proposing **construction activity** of the need to apply for and obtain coverage under the **Agency**'s general permit to *Discharge Stormwater Associated with Construction Activity No. MN R100001*.

c. Public input

Provide the opportunity for the public to report non-compliant erosion, sediment, and waste controls within the **Permittee** jurisdiction. Various methods for reporting noncompliant erosion, sediment, and waste controls must be available to the public, including: website application, phone calls, and/or email communication.

d. Site inspections

The program must include written procedures for conducting site inspections to determine compliance with the **Permittee**'s regulatory mechanism(s). The written procedures must include:

(1) Procedures for identifying priority sites for inspection. Prioritization can be based on parameters such as: topography, soil characteristics, types of **receiving water**(s), stage of construction, compliance history, weather conditions, or other local characteristics and concerns.

(2) A frequency at which site inspections will be conducted.

(3) Name(s) of individual(s) or position titles responsible for conducting site inspections.

(4) A checklist or form to document site inspections when determining compliance.

e. ERPs required by Part III.B. in this permit.

f. A database of construction sites subject to the **Permittee**'s regulatory mechanism to track site plan review, construction progress and erosion, sediment, and waste control compliance.

g. Staff training

The training must address the job-specific duties for the following position titles or municipal staff:

(1) Erosion and sediment control/**stormwater** inspectors:

(a) Knowledge of the erosion, sediment, and waste control requirements in the **Agency**'s general permit to *Discharge Stormwater Associated with Construction Activity No. MN R100001.*

(b) Familiarity with compliant and noncompliant erosion, sediment, and waste control **BMP**s at construction sites.

(c) Appropriate **BMP** selection, installation, and maintenance.

(d) Erosion, sediment, and waste control inspection documentation and use of enforcement response procedures.

(2) Other construction inspectors: erosion, sediment, and waste control **BMP**s for construction sites and procedures for notifying the appropriate **Permittee** staff of noncompliance.

(3) Construction site plan reviewers: knowledge of the erosion, sediment, and waste control **BMP**s required in the **Agency**'s general permit to *Discharge Stormwater Associated with Construction Activity No. MN R100001* and other erosion and sediment control design standards.

h. Maintain documentation of the following information:

(1) For each site plan review – The project name, location, total acreage to be disturbed, **owner** of the proposed **construction activity**, and any **stormwater** related comments and supporting documentation used by the **Permittee** to determine project approval or denial.

(2) For each site inspection – Inspection checklists or other written means used to document site inspections.

(3) Staff training, including a list of topics covered, names of employees in attendance, and date of each event.

5. Post-Construction **Stormwater** Management

Continue to develop, implement, and enforce a post-construction **stormwater** management program that prevents or **reduce**s **water pollution** after **construction activity** is completed, related to **new development** and **redevelopment** projects and **linear project**s with land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger **common plan of development or sale**, within the **Permittee**'s jurisdiction and that **discharge** to the **Permittee**'s **MS4**. At a minimum, the program must consist of the following:

a. A regulatory mechanism(s) that incorporates:

(1) A requirement that **owner**s and/or **operator**s of **construction activity** submit site plans with post-construction **stormwater** management **BMP**s to the **Permittee** for review and approval, prior to the start of **construction activity**.

(2) Conditions for post-construction **stormwater** management:

The **Permittee** must develop and implement a post-construction **stormwater** management program for **construction activity** that requires volume reduction using any combination of **BMP**s, with the highest preference given to **green infrastructure** techniques and practices (e.g., infiltration, evapotranspiration, harvest and use, urban forestry, green roofs, or other volume reduction practices). For projects that create or fully reconstruct one or more acres of **impervious surface**, the project must retain on-site to the **MEP** (not discharge to a surface water) the following treatment volumes by type of project:

(a) For **new development** or **redevelopment** projects (excluding **linear project**s) a **water quality volume** of one (1) inch times the new and/or fully reconstructed **impervious surface**s, unless precluded by the **stormwater** infiltration prohibitions in Part III.C.5.a.(3).

(b) For **linear project**s, a **water quality volume** of one (1) inch times the net increase of **impervious surface**s, in addition to a reduction in **stormwater** runoff volume from fully reconstructed surfaces, unless precluded by the **stormwater** infiltration prohibitions in Part III.C.5.a.(3). Where this cannot be achieved within the existing right-of-way, a reasonable attempt to obtain additional right-of-way, easement, or other permission to treat the stormwater during the project planning process must be made.

(3) **Stormwater** infiltration prohibitions

The **Permittee**'s regulatory mechanism(s) must prohibit the construction of infiltration **structural stormwater BMP**s to achieve the conditions for post-construction **stormwater** management in Part III.C.5.a(2) when the infiltration **structural stormwater BMP** will receive **discharge**s from, or be constructed in areas:

(a) That receive discharges from vehicle fueling and maintenance, regardless of the amount of new and/or fully reconstructed **impervious surface**.

(b) That receive **stormwater** runoff from entities regulated under NPDES for industrial **stormwater**: automobile salvage yards; scrap recycling and waste recycling facilities; hazardous waste treatment, storage, or disposal facilities; or air transportation facilities that conduct deicing activities.

(c) Where high levels of contaminants in soil or groundwater may be mobilized by the infiltrating **stormwater**. To make this determination, the **owner**s and/or **operator**s of **construction activity** must complete the **Agency**'s site screening assessment checklist, which is available in the Minnesota Stormwater Manual, or conduct their own assessment. The assessment must be retained with the site plans.

(d) Where soil infiltration rates are more than 8.3 inches per hour unless soils are amended to slow the infiltration rate below 8.3 inches per hour.

(e) Of predominately Hydrologic Soil Group D (clay) soils.

(f) Within 1,000 feet up-gradient or 100 feet down gradient of active karst features.

(g) Outside of an Emergency Response Area (ERA) within a Drinking Water Supply Management Area (DWSMA) (Minn. R. 4720.5100, subp. 13.) classified as high or very high vulnerability as defined by the Minnesota Department of Health, unless the **Permittee** performs or approves a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater.

(h) In an ERA within a DWSMA classified as high or very high vulnerability as defined by the Minnesota Department of Health.

(i) In an ERA within a DWSMA classified as moderate vulnerability as defined by the Minnesota Department of Health, unless the **Permittee** performs or approves a higher level of engineering review sufficient to provide a functioning treatment system and to prevent the adverse impacts to groundwater.

(j) With less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock.

(k) Where stormwater infiltration would cause erosion or effect the stability of bluff lines or steep slopes.

(4) **Stormwater** treatment requirements when infiltration is prohibited

For those projects where the **water quality volume** reduction requirement as described in Part III.C.5.a.(2), cannot be met on site, the **Permittee**'s regulatory mechanism(s) must require the use of other methods of **stormwater** treatment (e.g., wet sedimentation basin, filtration basin) for the required **water quality volume** not treated through volume reduction practices.

(5) Mitigation provisions

There may be circumstances where the **Permittee** or other **owner**s and **operator**s of a **construction activity** cannot cost effectively meet the conditions for post-construction **stormwater** management in Part III.C.5.a.(2) and (4) on the site of the original **construction activity**. For this purpose, the **Permittee** must identify, or may require **owner**s or **operator**s of a **construction activity** to identify, locations where mitigation projects can be completed. The **Permittee**'s regulatory mechanism(s) must ensure that any **stormwater discharge**s not addressed on the site of the original **construction activity** are addressed through mitigation and, at a minimum, must ensure the following requirements are met:

(a) Mitigation project areas are selected in the following order of preference:

1) Locations that yield benefits to the same **receiving water** that receives runoff from the original **construction activity**.

2) Locations within the same Department of Natural Resources (DNR) catchment areas as the original **construction activity**.

3) Locations in the next adjacent **DNR catchment area** up-stream.

4) Locations anywhere within the **Permittee**'s jurisdiction.

(b) Mitigation projects must involve the creation of new **structural stormwater BMP**s or the retrofit of existing **structural stormwater BMP**s, or the use of a properly designed regional **structural stormwater BMP**.

(c) Routine maintenance of **structural stormwater BMP**s already required by this permit cannot be used to meet mitigation requirements of this Part.

(d) The **Permittee** must develop and retain documentation that mitigation projects are carried out consistently with Part III.C.5.a.(5)(a) and (b).

(e) The **Permittee** must document who is responsible for long-term maintenance on all mitigation projects of this Part.

(f) If the **Permittee** receives payment from the **owner** and/or **operator** of a **construction activity** for mitigation purposes in lieu of the **owner** or **operator** of that **construction activity** meeting the conditions for post-construction **stormwater** management in Part III.C.5.a.(2) and (4) the **Permittee** must apply any such payment received to a public **stormwater** project, all projects must be in compliance with Part III.C.5.a.(5)(a)-(e).

(6) Long-term maintenance of **structural stormwater BMP**s

The **Permittee**'s regulatory mechanism(s) must provide for the establishment of legal mechanism(s) between the **Permittee** and **owner**s or **operator**s responsible for the long-term maintenance of **structural stormwater BMP**s not owned or operated by the **Permittee**, that have been implemented to meet the conditions for post-construction **stormwater** management in Part III.C.5.a.(2) and (4). This only includes **structural stormwater BMP**s constructed after the issuance date of this permit, that are directly connected to the **Permittee**'s **MS4**, and that are in the **Permittee**'s jurisdiction. The legal mechanism must include provisions that, at a minimum:

(a) Allow the **Permittee** to conduct inspections of **structural stormwater BMP**s not owned or operated by the **Permittee**, perform necessary maintenance, and assess costs for those **structural stormwater BMP**s when the **Permittee** determines that the **owner** and/or **operator** of that **structural stormwater BMP** has not conducted maintenance.

(b) Include conditions that are designed to preserve the **Permittee**'s right to ensure maintenance responsibility, for **structural stormwater BMP**s not owned or operated by the **Permittee**, when those responsibilities are legally transferred to another party.

(c) Include conditions that are designed to protect/preserve **structural stormwater BMP**s and site features that are implemented to comply with Part III.C.5.a.(2) and (4). If site configurations or **structural stormwater BMP**s change, causing decreased **structural stormwater BMP** effectiveness, new or improved **structural stormwater BMP**s must be implemented to ensure the conditions for post-construction **stormwater** management continue to be met.

b. Site plan review

(1) The program must include written procedures for site plan reviews conducted by the **Permittee** prior to the start of **construction activity**, to ensure compliance with requirements of the regulatory mechanism(s).

(2) Include a process for the review of impacts to the design capacity of existing **structural stormwater BMP**s when new or **redevelopment** projects propose to increase the drainage area, loading and/or **stormwater** volume to the **structural stormwater BMP**s compared to the original design capacity.

c. Maintain documentation of the following:

(1) Any supporting documentation used by the **Permittee** to determine compliance with Part III.C.5.a, including the total **water quality volume** to be achieved, the project name, location, **owner** of the **construction activity**, any checklists used for conducting site plan reviews, and any calculations used to determine compliance.

(2) All supporting documentation associated with the **Permittee**'s approval of proposed stormwater infiltration in high or very high vulnerability areas within a DWSMA.

(3) All supporting documentation associated with mitigation projects authorized by the **Permittee**.

(4) Payments received and used in accordance with Part III.C.5.a.(5)(f).

(5) All legal mechanisms drafted in accordance with Part III.C.5.a.(6).

6. Pollution Prevention and Good Housekeeping for Municipal Operations

Continue to develop and implement an operations and maintenance program that prevents or **reduce**s the **discharge** of pollutants from **Permittee** owned/operated facilities and operations to the **MS4**. The program must include written standard operating procedures for preventing pollution during municipal operations (e.g., street sweeper operation, procedures for lawn maintenance, fertilizer and pesticide usage, equipment cleaning, and vehicle maintenance). At a minimum, the operations and maintenance program must include the following:

a. A facilities inventory

The **Permittee** must develop and maintain an inventory of **Permittee** owned/operated facilities that contribute pollutants to **stormwater discharge**s. Facilities to be inventoried may include, but are not limited to: composting, equipment storage and maintenance, hazardous waste disposal, hazardous waste handling and transfer, landfills, solid waste handling and transfer, parks, pesticide storage, public parking lots, public golf courses, public swimming pools, public works yards, recycling, salt storage, vehicle storage and maintenance (e.g., fueling and washing) yards, and materials storage yards.

b. Development and implementation of **BMP**s for inventoried facilities and municipal operations that prevent or **reduce discharge**s of pollutants to the **MS4** and from:

(1) All inventoried facilities that **discharge** to the **MS4**, and

(2) The following municipal operations that may contribute pollutants to **stormwater discharge**s, where applicable:

(a) Waste disposal and storage, including dumpsters.

(b) Municipal landfills, hazardous waste treatment, disposal and recovery facilities and industrial facilities that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

(c) Vehicle fueling, washing and maintenance.

(d) Emergency response, including spill prevention plans.

(e) Cleaning of maintenance equipment, building exteriors, dumpsters, and the disposal of associated waste and wastewater.

(f) Use, storage and disposal of **significant materials**.

(g) Landscaping, park, and lawn maintenance.

(h) Road maintenance, including pothole repair, road shoulder maintenance, pavement marking, sealing, and repaving.

(i) Right-of-way maintenance, including mowing.

(j) Application of herbicides, pesticides, and fertilizers.

(k) Cold-weather operations, including plowing or other snow removal practices, sand use, and application of anti-icing and deicing compounds.

c. Development and implementation of **BMP**s for **MS4 discharge**s that may affect Source Water Protection Areas (Minn. R. 4720.5100 – 4720.5590)

The **Permittee** must incorporate **BMP**s into the **SWMP** to protect any of the following drinking water sources that the **MS4 discharge** may affect and the **Permittee** must include the map of these sources with the **SWMP**, if they have been mapped.

(1) Wells and source waters for DWSMAs identified as vulnerable under Minn. R. 4720.5205, 4720.5210, and 4720.5330.

(2) Source water protection areas for surface intakes identified in the source water assessments conducted by or for the Minnesota Department of Health under the Safe Drinking Water Act, U.S.C. §§ 300j – 13.

d. Pond assessment procedures and schedule

The **Permittee** must develop written procedures and a schedule for the purpose of determining the total suspended solids (TSS) and total phosphorus (TP) treatment effectiveness of all **Permittee** owned/operated ponds constructed and used for the collection and treatment of **stormwater**. The schedule may exceed this permit term and must be based on measurable goals and priorities established by the **Permittee**.

e. Inspections

(1) Unless inspection frequency is adjusted as described below, the **Permittee** must conduct annual inspections of **structural stormwater BMP**s to determine structural integrity, proper function and maintenance needs. Inspections of **structural stormwater BMP**s must be conducted annually unless the **Permittee** determines if either of the following conditions apply:

(a) Complaints received or patterns of maintenance indicate a greater frequency is necessary.

(b) Maintenance or sediment removal is not required after completion of the first two annual inspections, then the **Permittee** may **reduce** the frequency of inspections to once every two (2) years.

(2) Inspect, at a minimum, twenty (20) percent of the **MS4 outfall**s and ponds each year on a rotating basis in order to determine structural integrity, proper function, and maintenance needs.

(3) Inspect all stockpile, storage, and material handling areas that contribute pollutants to stormwater as follows:

(a) Weekly inspections when material is being actively handled, used or disturbed on daily basis.

(b) Monthly inspections when material is not being actively handled, used or disturbed. Install perimeter controls at stockpiles that are not covered to prevent material from discharging to the **MS4**.

f. Maintenance

Based on inspection findings, the **Permittee** must determine if repair, replacement, or maintenance measures are necessary in order to ensure the structural integrity, proper function, and treatment effectiveness of **structural stormwater BMP**s. Necessary maintenance must be completed as soon as possible to prevent or **reduce** the **discharge** of pollutants to the **MS4**. When repair, replacement, or maintenance must be delayed, the **Permittee** must prioritize the needed repair, replacement, or maintenance and implement the following:

(1) Preventive maintenance for the **MS4** components and **structural stormwater BMP**s.

(2) Dewater and dispose of solids, floatables, dredgings, or other pollutants resulting from the control and/or treatment of **stormwater** to prevent any pollutant from such materials from entering **receiving water**s. The **Permittee**, in disposing of such materials, must comply with all applicable statutes and rules.

g. Operate and maintain the **Permittee**'s parking lots, streets, roads, and highways to **reduce** the **discharge** of pollutants to the **MEP**. The **Permittee** must, at a minimum:

(1) Sweep public parking lots, streets, roads, and highways under its jurisdiction including prioritizing areas based on land use, trash, and **stormwater** pollutant levels generated.

(2) Sweep streets at least two (2) times per year, once in the spring and once in the fall and sweep higher priority areas more frequently.

h. Flood control **BMP**s

(1) Ensure that any flood control improvement projects the **Permittee** undertakes are designed to minimize the impacts on the water quality of the **receiving water**. When repairs, improvements or changes are planned for existing flood control devices, the **Permittee** must evaluate the feasibility of retrofitting the existing devices to provide volume reduction and pollutant removal from **stormwater discharge**s.

(2) Document and maintain an inventory of flood control detention facilities that provide rate control of **stormwater discharge**s.

i. Retrofit plan

(1) Develop a retrofit plan to evaluate the ability to implement **structural stormwater BMP**s in areas of the **Permittee**'s jurisdiction that currently do not have **stormwater** runoff treatment or where existing **structural stormwater BMP**s could be enhanced to improve pollutant removal capability. The **Permittee** must submit the retrofit plan to the **Agency** for review and approval within 24 months of receiving permit coverage. Once approved by the **Agency**, the retrofit plan will become an enforceable part of the **SWMP**.

(2) At a minimum, the retrofit plan must include a discussion of the following:

(a) Retrofits on lands the **Permittee** owns, including public parcels of land or public right-of-way areas for implementation of **structural stormwater BMP**s.

(b) Developing strategies to encourage privately owned parcels to install **stormwater** retrofits to **reduce** and/or treat **stormwater** runoff from privately owned **impervious surface**s.

j. Employee training

The **Permittee** must develop and implement a **stormwater** management training program commensurate with employees' job duties as they relate to the **Permittee**'s **SWMP**. The employee training program must:

(1) Address the importance of protecting water quality.

(2) Cover the requirements of the permit relevant to the job duties of the employee.

(3) Include a schedule that establishes initial training for new and seasonal employees, and recurring training intervals for existing employees to address changes in procedures, practices, techniques, or requirements.

k. Maintain documentation of the following information:

(1) Date(s) and description of findings of all inspections conducted in accordance with Part III.C.6.e.

(2) Any adjustments to inspection frequency as authorized under Part III.C.6.e.(1).

(3) A description of maintenance conducted, including dates, as a result of inspection findings.

(4) Pond sediment excavation and removal activities, including:

(a) The unique ID number of each **stormwater** pond from which sediment is removed.

(b) The volume (e.g., cubic yards) of sediment removed from each **stormwater** pond.

(c) Results from any testing of sediment from each removal activity.

(d) Location(s) of final disposal of sediment from each **stormwater** pond.

(5) Employee **stormwater** management training events, including a list of topics covered, names of employees in attendance, and date of each event.

7. **Stormwater** Runoff Monitoring and Analysis

The goal of **stormwater** runoff monitoring and analysis is to quantify **stormwater** volumes and pollutant loads from the **MS4** and to provide information on the effectiveness of the **SWMP**. The **Permittee** must continue to develop and implement a monitoring and analysis program, including the following:

a. The quality assurance project plan for lab and field methods and procedures must comply with the following **USEPA** requirements and guidance or receive approval from the **Agency** for variations from these protocols:

(1) **USEPA** Requirement for Quality Assurance Project Plans (**USEPA** QA/R-5) (**USEPA**/240/B-01/003).

(2) **USEPA** Guidance for Quality Assurance Project Plans (**USEPA** QA/G-5) (**USEPA**/600/R98/018).

(3) The **Permittee** must utilize Minnesota Department of Health-certified laboratory(s).

b. The **Permittee** must monitor water quality at a minimum of six (6) sites. Each year, the **Permittee** must select sites to monitor for the following year. Sites may be changed, or rotated, for cost-effective resource use, however reasonable effort must be made to monitor for at least two consecutive years at a site. In choice and location of stations and monitoring activities, consider safety, backwatering effects, and access. The monitoring of selected sites must include any combination of the following:

(1) **BMP**s to determine effectiveness.

(2) The largest **outfall**(s) to the Mississippi River.

(3) Representative land use areas.

(4) A determination of contributions from upstream jurisdictions.

c. The **Permittee** must implement its monitoring and analysis program in accordance with TABLE 1 as follows:

TABLE 1 - MONITORING AND ANALYSIS

Analytical data for samples			**Sites 1-6 Monitored by the Permittee (Types 1, 2, 3, 4)**
Parameter	**Sample Type**	**Frequency** (Note 3)	
Chloride, Total	Flow-paced composite samples over non-ice time period (approx. March through November) Grab samples at least two times during typical winter thaw (approx. December to March)	10 samples/year, over a range of seasons and events	X
Copper, Total (as Cu)			X
Lead, Total (as Pb)			X
Zinc, Total (as Zn)			X
Hardness, Carbonate (as CaCo3)			X
Nitrate + Nitrite, Total (as N)			X
Nitrogen, Total			X
Phosphorus, Total (as P)			X
Solids, Total Suspended (TSS)			X
Solids, Volatile Suspended (VSS)			X
Solids, Inorganic Suspended by difference (TSS-VSS=ISS)			X
Carbon, Organic Dissolved			X
Chemical Oxygen Demand (COD)			X
Phosphorus, Total Dissolved or Ortho			X
Solids, Total Dissolved (TDS)			X
Flow	Measurement	Continuous during period when flow-paced composite samples are collected as required for other parameters in this table Point-estimated when grab samples are collected as required for other parameters in this table	X
Precipitation	One site for all monitoring locations	Daily	N/A
Oil and grease (Note 1)	Grab	Quarterly (spring, summer, fall, winter)	X
Escherichia coli (E. coli)			X
pH (Note 2)	Grab, measured by multi-parameter probe		X

Note 1: Pilot. If oil and grease is less than 15 mg/L in all quarterly samples for the first 2 years of the permit term, the **Permittee** may end oil and grease sampling at that/those site(s). If oil and grease is at least 15 mg/L in any quarterly sample for the first 2 years of the permit term, then oil and grease sampling must continue through the entire permit term at that/those site(s).
Note 2: Field analysis.
Note 3: Taking into consideration weather and safety.
X: Monitoring of parameter is applicable.
N/A: Not applicable.

Type 1. **BMP**s to determine effectiveness.
Type 2. The largest **outfall**(s) to the Mississippi River.
Type 3. Representative land use areas.
Type 4. A determination of contributions from upstream jurisdictions.

8. Additional MCM requirements of the **SWMP**

   Each MCM of the **SWMP** must include the following:

   a. Identification of the sources of pollutants targeted for reduction and the sensitivity of the **receiving water**s.

   b. A description of and the scope of the **BMP**s for each MCM.

   c. Identification of staff and financial resources, including estimated annual budgets, for the permit term dedicated to implementation of the MCM.

   d. Measurable goals for each MCM that will be used to determine the success and/or benefits of the MCM.

   e. Schedules and a protocol for monitoring, recordkeeping, and reporting.

   f. An implementation schedule for new or revised **BMP**s.

   g. A detailed description or copy of any agreement between the **Permittee** and partner(s) to implement the MCM describing the rights, roles, and responsibilities of each party to the agreement.

D. DISCHARGES TO IMPAIRED WATERS WITH A EPA-APPROVED TMDL THAT INCLUDES AN APPLICABLE WLA

If the **Permittee** has one or more **Waste Load Allocations** (**WLA**) in a **USEPA**-approved **TMDL**, the **Permittee** must select and implement a program of appropriate **BMP**s and measurable goals for each MCM including schedules to meet the timeframes for the **WLA**s. At a minimum, the **Permittee** must:

1. For each **applicable WLA** approved prior to the issuance date of this permit, the **Permittee** must submit to the **Agency** for approval, on a form provided by the **Commissioner**, the following information within nine (9) months of receiving permit coverage. Once approved by the **Agency**, the submittal will become an enforceable part of the **SWMP**. The submittal must include the following:

   a. **TMDL** project name(s).

   b. Numeric **WLA**(s), including units.

   c. Type of **WLA** (i.e., categorical or individual).

   d. Pollutant(s) of concern.

   e. Applicable flow data specific to each **applicable WLA**.

   f. For each **applicable WLA** not met by the date of permit coverage, a compliance schedule is required. Compliance schedules can be developed to include multiple **WLA**s associated with a **TMDL** project and must include:

      (a) Interim milestones, expressed as **BMP**s or progress toward implementation of **BMP**s, to be achieved during the term of this permit.

(b) Dates for implementation of interim milestones.

(c) Strategies for continued **BMP** implementation beyond the term of this permit.

(d) Target dates the **applicable WLA**(s) will be achieved.

g. For each **applicable WLA** the **Permittee** is reasonably confident is being met by the date of permit coverage, the **Permittee** must provide the following documentation:

(a) Implemented **BMP**s used to meet each **applicable WLA**.

(b) A narrative describing the **Permittee**'s strategy for long-term continuation of meeting each **applicable WLA**.

E. ALUM OR FERRIC CHLORIDE PHOSPHORUS TREATMENT SYSTEMS

If the **Permittee** uses an **alum or ferric chloride phosphorus treatment system**, the **Permittee** must comply with the following:

1. Minimum requirements of an **alum or ferric chloride phosphorus treatment system**

a. Limitations

(1) The **Permittee** must use the treatment system for the treatment of phosphorus in **stormwater**. **Non-stormwater discharge**s must not be treated by this system.

(2) The treatment system must be contained within the conveyances and **structural stormwater BMP**s of the **MS4**. The utilized conveyances and **structural stormwater BMP**s must not include any **receiving water**s.

(3) Phosphorus treatment systems utilizing chemicals other than alum or ferric chloride must receive written approval from the **Agency**.

(4) In-lake phosphorus treatment activities are not authorized under this permit.

b. Treatment system design

(1) The treatment system must be constructed in a manner that diverts the **stormwater** flow to be treated from the main conveyance system.

(2) A high flow bypass must be part of the inlet design.

(3) A flocculent storage/settling area must be incorporated into the design and adequate maintenance access must be provided (minimum of 8 feet wide) for the removal of accumulated sediment.

2. Monitoring during operation

   a. A designated **person** must perform visual monitoring of the treatment system for proper performance at least once every seven (7) days and within 24 hours after a rainfall event greater than 2.5 inches in 24 hours. Following visual monitoring which occurs within 24 hours after a rainfall event, the next visual monitoring must be conducted within seven (7) days after that rainfall event.

   b. Three benchmark monitoring stations must be established. TABLE 2 must be used for the parameters, units of measure, and frequency of measurement for each station.

   c. Samples must be collected as grab samples or flow-weighted 24-hour composite samples.

   d. Each sample, excluding pH samples, must be analyzed by a laboratory certified by the Minnesota Department of Health and/or the **Agency**, and:

      (1) Sample preservation and test procedures for the analysis of pollutants must conform to 40 CFR pt. 136 and Minn. R. 7041.3200.

      (2) Detection limits for dissolved phosphorus, dissolved aluminum, and dissolved iron must be a minimum of 6 micrograms per liter (µg/L), 10 µg/L, and 20 µg/L, respectively.

      (3) pH must be measured within 15 minutes of sample collection using calibrated and maintained equipment.

TABLE 2 - MONITORING PARAMETERS DURING OPERATION

Station	Alum Parameters	Ferric Parameters	Units	Frequency
Upstream-Background	Total Phosphorus	Total Phosphorus	mg/L	1 x week
	Dissolved Phosphorus	Dissolved Phosphorus	mg/L	1 x week
	Total Aluminum	Total Iron	mg/L	1 x month
	Dissolved Aluminum	Dissolved Iron	mg/L	1 x week
	pH	pH	SU	1 x week
	Flow	Flow	Mgd	Daily
Alum or Ferric Chloride Feed	Alum	Ferric	gallons	Daily total dosed in gallons
Discharge from Treatment	Total Phosphorus	Total Phosphorus	mg/L	1 x week
	Dissolved Phosphorus	Dissolved Phosphorus	mg/L	1 x week
	Total Aluminum	Total Iron	mg/L	1 x month
	Dissolved Aluminum	Dissolved Iron	mg/L	1 x week
	pH	pH	SU	1 x week
	Flow	Flow	Mgd	Daily

   e. In the following situations, the **Permittee** must perform corrective action(s) and immediately notify the Minnesota Department of Public Safety Duty Officer at 1-800-422-0798 (toll free) or 651-649-5451 (metro area):

(1) The pH of the **discharge**d water is not within the range of 6.0 and 9.0.

(2) Any indications of toxicity or measurements exceeding **water quality standards**.

(3) A spill, as defined in Minn. Stat. § 155.061, of alum or ferric chloride.

3. On-Site Recordkeeping

A record of the following design parameters shall be kept on-site:

(1) Site-specific jar testing conducted using typical and representative water samples in accordance with ASTM D2035-08 (2003)

(2) Baseline concentrations of the following parameters in the influent and **receiving water**s:

(a) Aluminum or Iron

(b) Phosphorus

(3) The following system parameters and how each was determined:

(a) Flocculent settling velocity

(b) Minimum required retention time

(c) Rate of diversion of **stormwater** into the system

(d) The flow rate from the discharge of the outlet structure

(e) Range of expected dosing rates

4. Treatment System Management

The following site-specific procedures shall be developed and a copy kept on-site:

a. Procedures for the installation, operation and maintenance of all pumps, generators, control systems, and other equipment.

b. Specific parameters for determining when the solids must be removed from the system and how the solids will be handled and disposed of.

c. Procedures for cleaning up and/or containing a spill of each chemical stored on-site.

F. STORMWATER MANAGEMENT PROGRAM (SWMP) MODIFICATION

1. The **Commissioner** may require the **Permittee** to modify the **SWMP** as needed, in accordance with the procedures of Minn. R. 7001, and must consider the following factors:

a. **Discharge**s from the **MS4** are impacting the quality of **receiving water**s.

b. More stringent requirements are necessary to comply with state or federal regulations.

c. Additional conditions are deemed necessary to comply with requirements of the Clean Water Act and to protect and restore water quality.

2. Modifications required by the **Commissioner** for the **SWMP** must be requested in writing, setting forth schedules for compliance, and offering the **Permittee** the opportunity to propose alternative **SWMP** modifications to meet the objectives of the requested modification.

3. Modifications that the **Permittee** chooses to make to the **SWMP** must be approved by the **Commissioner** in accordance with the procedures of Minn. R. 7001. All requests must be in writing, setting forth schedules for compliance. The request must discuss alternative program modifications, ensure compliance with requirements of the permit, and meet other applicable laws.

4. The **SWMP** may be modified by the **Permittee** without prior approval of the **Commissioner**, provided the modification is in accordance with the following:

   a. The **Permittee** adds one or more **BMP**(s) and none subtracted from the **SWMP**.

   b. A less effective **BMP** identified in the **SWMP** is replaced with a more effective **BMP**. The alternate **BMP** must address the same, or similar, concerns as the ineffective or failed **BMP**.

   c. The **Commissioner** and public are notified of the modification in the annual report for the year the modification is made. If a less effective **BMP** is replaced with a more effective **BMP**, the **Permittee** must include an explanation of circumstance(s) and reason(s) for the replacement of the **BMP**.

5. Proposed modifications must be included in the annual report required under Part IV.D. and the public must be given prior notification and opportunity for comment through the annual report public notice and meeting required under Part III.C.2. Upon written approval of the **Commissioner**, the **Permittee** may modify the **SWMP** to implement:

   a. **BMP**s needed to make reasonable progress toward meeting one or more **applicable WLA**(s) as required under Part III.D.

   b. Modifications to the **stormwater** runoff monitoring and analysis program in accordance with Part III.C.7. of this permit.

PART IV. SWMP ASSESSMENT, UPDATES, REPORTING AND OTHER SUBMITTALS

A. SWMP ASSESSMENT

The **Permittee** must complete an annual assessment of the **SWMP** based on information collected and analyzed during the reporting period, including activities implemented in Part III.C.1. – 7. The purpose of the annual **SWMP** assessment is to provide information for improving performance, including but not limited to reducing pollutant loading and runoff volumes, and to optimize associated planning and design, construction, operation, and maintenance of the **MS4**. The annual **SWMP** assessment must be submitted to the **Agency** with each annual report and must include the following:

1. An analysis of the performance and effectiveness of **BMP**s in reducing **stormwater** runoff volumes and pollutant loading to **receiving water**s.

2. An analysis of the effectiveness of the **SWMP** in achieving permit compliance, measurable goals and other **long-term goals**.

3. A fiscal analysis of the budget utilized for implementing the **SWMP** including an evaluation of the resources used to implement the MCMs required by the permit. The analysis must include the capital, operation, maintenance, and staff resource costs for implementing the **SWMP**.

B. SWMP UPDATES

The **Permittee** must complete revisions to incorporate requirements of Part III.A. – E. into the current **SWMP** within 12 months of the date permit coverage is extended, unless other timelines have been specifically established in this permit.

C. RECORDKEEPING

1. The **Permittee** must keep records required by the NPDES/SDS **MS4** permit for at least three (3) years beyond the term of this permit. The **Permittee** must retain copies of the **SWMP**, all documentation necessary to comply with the permit, all data and information used by the **Permittee** to develop the **SWMP**, and any information developed as a requirement of this permit or as requested by the **Commissioner**, for a period of at least three (3) years beyond the date of permit expiration. The **Permittee** must extend these record retention periods upon request of the **Commissioner** and/or during the course of an unresolved enforcement action (Minn. R. 7001.0150, subp. 2[C]).

2. The **Permittee** must make its records, including the **SWMP**, available to the public at reasonable times during regular business hours (see 40 CFR § 122.7 for confidentiality provision).

3. Except for data determined to be confidential according to Minn. Stat. § 116.075, subd. 2, all documents, plans, and reports required by this permit must be available for inspection by the **Agency** upon request. **Stormwater** runoff monitoring or effluent data must not be considered confidential. Confidential material must be submitted according to Minn. R. 7000.1300.

D. ANNUAL REPORTING

The **Permittee** must submit an annual report to the **Agency** by June 30th of each calendar year. The annual report must cover the portion of the previous calendar year during which the **Permittee** was authorized to **discharge stormwater** under this permit. This report must, at a minimum, consist of the following:

1. Public education and outreach

    a. Quantities and descriptions of educational materials distributed and the number of visits by the public to **stormwater** education websites.

    b. A summary of the education and outreach activities held including dates of events.

    c. Any modifications made to the program as a result of the annual evaluation as described in Part III.C.1.b.(5).

    d. If the **Permittee** relied upon other organizations for some, or all, of its education and outreach program, include a summary of activities conducted by those other organizations.

2. Public participation and involvement

    a. A summary of the written public input received on the **SWMP** and the **Permittee**'s response to the input as described in Part III.C.2.

    b. Any modifications made to the **SWMP** as a result of the input received during the public meeting.

    c. The date and location of the public meeting as described in Part III.C.2.a.

    d. A formal resolution from the **Permittee**'s governing body adopting the annual report and the **SWMP** as required in Part III.C.2.e. The resolution must be submitted to the **Agency** no later than August 30th of each year if not available at the time of annual report submittal.

3. Illicit discharge detection and elimination

    a. A description and the date of the most recent update to the electronic storm sewer system inventory and map completed during the reporting year.

    b. The number of spills and **illicit discharge**s that occurred and a description of the response, containment, and cleanup of the spills and **illicit** discharges.

    c. The number of **illicit discharge** inspections and/or screening activities completed during the reporting year and a description of the response, investigation, and enforcement response procedures utilized to eliminate the **illicit discharge**s.

    d. Reports of alleged **illicit discharge**s received, including date(s) of the report(s), and a description of the response, investigation, and enforcement response procedures utilized to eliminate the **illicit discharge**(s).

    e. Sources of **illicit discharge**s, including a description and the responsible party if known.

    f. Identification of **outfall**s or other areas where **illicit discharge**s have been discovered and a description of the response, investigation, and enforcement response procedures utilized to eliminate the **illicit discharge**(s).

g. A description of the education and outreach activities, implemented during the reporting year, to inform municipal employees, the public, and industry about reporting, responding to, and eliminating **illicit discharge**s.

h. Update the inventory of hazardous waste and other industrial facilities, including municipal procedures implemented to **reduce illicit discharge**s to the **MS4** from facilities within the **stormwater hotspot** area.

4. Construction site **stormwater** runoff control

a. The number of construction site plans reviewed and approved.

b. The number of construction **stormwater** complaints received and the responses to those complaints.

c. The number of site inspections completed and a summary of inspection findings.

d. The number of violations of the **Permittee** regulatory mechanism(s) for construction site **stormwater** runoff control and the types of enforcement response procedures utilized.

e. The title of the construction **stormwater** training attended by **Permittee** staff.

5. Post-construction **stormwater** management

a. The number of new and **redevelopment construction activity** projects required to meet the terms of the **Permittee** regulatory mechanism(s).

b. The number and type of **structural stormwater BMP**s implemented to meet the terms of the regulatory mechanism(s) for new and **redevelopment construction activity**, including the number of **structural stormwater BMP** long-term maintenance agreements executed during the reporting year.

c. The number of new and **redevelopment construction activity** projects requiring mitigation, including:

(1) An explanation of why mitigation was required.

(2) The types of **structural stormwater BMP**s and the expected dates of implementation.

6. Pollution prevention and good housekeeping for municipal operations

a. A description of **Permittee** facilities and municipal operations that contribute pollutants to **stormwater discharge**s and the **BMP**s implemented to prevent polluted runoff from discharging to the **MS4**.

b. A description of the **BMP**s implemented for Source Water Protection Areas within the **Permittee**'s jurisdiction.

c. A brief description of all **outfall** inspection findings including any improvement projects completed at the **outfall** locations.

d. A list of the **MS4** components or facilities that need to be replaced, repaired, or maintained and a schedule for completing the replacement, repair, or maintenance activity.

e. The results of **structural stormwater BMP** inspections, assessments, maintenance, and repair activities including:

(1) Date.

(2) Estimation of sediment storage capacity and percent capacity remaining.

(3) The date of maintenance and/or repairs completed.

(4) The dates and quantity of removed substances from **structural stormwater BMPs**.

(5) The quantity of material removed by street sweeping. Seasonal sweepings for spring sand and fall leaves must be itemized as part of the total quantity.

(6) The quantity of deicing materials, chemicals, and sand applied to roadways. The location and description of all storage facilities for sand, deicing materials, and anti-icing solution used during winter maintenance activities.

(7) The number, type, and schedule of flood control improvement projects completed, including a description of the pollutant removal capabilities associated with each project.

(8) Employee **stormwater** management training events, including:

(a) Title and topic of training.

(b) Date of training.

(c) Names of **Permittee** staff attending the training.

f. The number and type of **structural stormwater BMP**s implemented as described in the retrofit plan in Part III.C.6.i, if applicable.

7. **Stormwater** runoff monitoring and analysis

a. Proposed **SWMP** modifications to substitute sources of monitoring and analysis data including a discussion of how the data will be utilized to demonstrate compliance with this permit and how it will characterize the nature of **stormwater discharge**s.

b. Any significant operational differences in monitoring and monitoring protocols as established in Part III.C.7.

c. A dataset plus a brief narrative description of the monitoring results collected by the **Permittee**, or any other entity on behalf of the **Permittee**, including data with tabulations, statistics, summary tables and graphics, by monitoring site with **receiving water** location description, including for all sites:

(1) Continuous flow data.

(2) Analytical data for all samples identified as storm composite or grab with corresponding flows and storm event periods identified.

(3) Estimates of storm event rainfall that generated the sampled **discharge**s, including approximate duration between each sampled storm event and the end of the corresponding previous measurable storm event.

(4) Loading calculations: estimated event, seasonal, and annual loads (total phosphorus, chloride, total suspended solids, volatile suspended solids, inorganic suspended solids by difference (TSS – VSS = ISS), and total nitrogen.

(5) Summary information including drainage area and estimated annual total **discharge** volume, storm event **discharge** volume, storm event discharge values that were used to calculate event-scale pollutant loads, runoff yield (inches/year), analyte flow weighted mean concentrations (event, seasonal, and annual) and analyte annual mean concentrations.

(6) Map showing **receiving water**s and representative land use management site locations as described in Part III.C.7.b.

(7) Estimated effectiveness (e.g., removal efficiency, load reduction, etc.) of **structural stormwater BMP**s.

(8) Calibration and verification of stormwater models, as applicable.

8. Discharges to impaired waters with a **USEPA**-approved **TMDL** that includes an **applicable WLA**

a. On a form provided by the **Commissioner**, an assessment of progress toward meeting each **applicable WLA**. The assessment of progress must include:

(1) A list of all **BMP**s being applied to achieve each **applicable WLA**. For each **structural stormwater BMP**, the **Permittee** must provide a unique identification (ID) number and geographic coordinate. If the listed **structural stormwater BMP** was inventoried during the 2011 Phase I **MS4** permit term, the same ID number must be used.

(2) A list of all **BMP**s the **Permittee** submitted with the **TMDL** compliance schedule and the stage of implementation for each **BMP**.

(3) An updated estimate of the cumulative reductions in loading achieved for each **pollutant of concern** associated with each **applicable WLA**.

(4) An updated narrative describing any adaptive management strategies used (including projected dates) for making progress toward achieving each **applicable WLA**.

(5) The results of the comparison(s) of estimated pollutant loading(s) to each **impaired water** in the **Permittee**'s jurisdiction and the **Permittee**'s **WLA** for that **impaired water**.

9. **Alum or Ferric Chloride Phosphorus Treatment System**s (if applicable)

a. The **permittee** must submit the following information with the Annual Report. The Annual Report must include a month-by-month summary of:

(1) Date(s) of operation.

(2) Chemical(s) used for treatment.

(3) Gallons of water treated.

(4) Gallons of alum or ferric chloride treatment used.

(5) Calculated pounds of phosphorus removed.

(6) Any performance issues and the corrective action(s), including the date(s) when corrective action(s) were taken.

10. The status of compliance with permit terms and conditions, including an assessment of the **BMP**s identified by the **Permittee** and progress toward achieving the measurable goals for Part III.C.1. – 7. and Part III.D. The assessment must be based on the results of information collected and analyzed, including inspection findings, **stormwater** runoff monitoring and public input received during the reporting period. In addition, the annual report must include:

    a. Any partnerships or activities coordinated with other local governments or organizations to assist with implementing the **SWMP** and any agreements related to this effort.

    b. A change in any **BMP**s or measurable goals for Part III.C.1. – 7. and Part III.D.

11. In addition, the **Permittee** must include the following in the annual report:

    a. A discussion of the modifications made to the **SWMP** as described in Part III.F.4. The discussion must include a description of why the modifications were/are needed. When feasible, this discussion must include qualitative and/or quantitative data demonstrating the effectiveness of the program elements or identifying impacts on the **receiving water**s.

    b. A discussion of the proposed modifications to the **SWMP** as described in Part III.F.5. The discussion must include a description of why the modifications are needed.

    c. The results of the annual assessment of the **SWMP** as required in Part IV.A.

E. WHERE TO SUBMIT

The **Permittee** must use an electronic submittal process, when provided by the **Agency**, for submitting information required by this permit. When submitting information electronically is not possible, the **Permittee** must use the following mailing address:

Supervisor, Municipal Stormwater Unit
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

PART V. GENERAL CONDITIONS

A. The **Agency**'s issuance of a permit does not release the **Permittee** from any liability, penalty, or duty imposed by Minnesota or federal statutes or rules or local ordinances, except the obligation to obtain the permit (Minn. R. 7001.0150, subp. 3, item A).

B. The **Agency**'s issuance of a permit does not prevent the future adoption by the **Agency** of pollution control rules, standards, or orders more stringent than those now in existence and does not prevent the enforcement of these rules, standards, or orders against the **Permittee** (Minn. R. 7001.0150, subp. 3, item B).

C. The permit does not convey a property right or an exclusive privilege (Minn. R. 7001.0150, subp. 3, item C).

D. The **Agency**'s issuance of a permit does not obligate the **Agency** to enforce local laws, rules or plans beyond that authorized by Minnesota statutes (Minn. R. 7001.0150, subp. 3, item D).

E. The **Permittee** must perform the actions or conduct the activity authorized by the permit in accordance with the plans and specifications approved by the **Agency** and in compliance with the conditions of the permit (Minn. R. 7001.0150, subp. 3, item E).

F. The **Permittee** must at all times properly operate and maintain the facilities and systems of treatment and control and the appurtenances related to them which are installed or used by the **Permittee** to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate **operator** staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The **Permittee** must install and maintain appropriate backup or auxiliary facilities if they are necessary to achieve compliance with the conditions of the permit and, for all permits other than hazardous waste facility permits, if these backup or auxiliary facilities are technically and economically feasible (Minn. R. 7001.0150, subp. 3, item F).

G. The **Permittee** may not knowingly make a false or misleading statement, representation, or certification in a record, report, plan, or other document required to be submitted to the **Agency** or to the **Commissioner** by the permit. The **Permittee** must immediately upon discovery report to the **Commissioner** an error or omission in these records, reports, plans, or other documents (Minn. Stat. § 609.671; Minn. R. 7001.0150, subp. 3, item G; and Minn. R. 7001.1090, subp. 1, items G and H).

H. The **Permittee** must, when requested by the **Commissioner**, submit within a reasonable time the information and reports that are relevant to the control of pollution regarding the construction, modification, or operation of the facility covered by the permit or regarding the conduct of the activity covered by the permit (Minn. R. 7001.0150, subp. 3, item H).

I. When authorized by Minn. Stat. §§ 115.04, 115B.17, subd. 4, and 116.091, and upon presentation of proper credentials, the **Agency**, or an authorized employee or agent of the **Agency**, must be allowed by the **Permittee** to enter at reasonable times upon the property of the **Permittee** to examine and copy books, papers, records, or memoranda pertaining to the activity covered by the permit; and to conduct surveys and investigations, including sampling or monitoring, pertaining to the construction, modification, or operation of the facility covered by the permit or pertaining to the activity covered by the permit (Minn. R. 7001.0150, subp. 3, item I).

J. If the **Permittee** discovers, through any means, including notification by the **Agency**, that noncompliance with a condition of the permit has occurred, the **Permittee** must take all reasonable steps to minimize the adverse impacts on human health, public drinking water supplies, or the environment resulting from the noncompliance (Minn. R. 7001.0150, subp. 3, item J).

K. If the **Permittee** discovers that noncompliance with a condition of the permit has occurred which could endanger human health, public drinking water supplies, or the environment, the **Permittee** must, within 24 hours of the discovery of the noncompliance, orally notify the **Commissioner**. Within five days of the discovery of the noncompliance, the **Permittee** must submit to the **Commissioner** a written description of the noncompliance; the cause of the noncompliance; the exact dates of the period of the noncompliance; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to **reduce**, eliminate, and prevent reoccurrence of the noncompliance (Minn. R. 7001.0150, subp. 3, item K).

L. The **Permittee** must report noncompliance with the permit not reported under item K as a part of the next report which the **Permittee** is required to submit under this permit. If no reports are required within 30 days of the discovery of the noncompliance, the **Permittee** must submit the information listed in item K within 30 days of the discovery of the noncompliance (Minn. R. 7001.0150, subp. 3, item L).

M. The **Permittee** must give advance notice to the **Commissioner** as soon as possible of planned physical alterations or additions to the permitted facility (**MS4**) or activity that may result in noncompliance with a Minnesota or federal pollution control statute or rule or a condition of the permit (Minn. R. 7001.0150, subp. 3, item M).

N. The permit is not transferable to any **person** without the express written approval of the **Agency** after compliance with the requirements of Minn. R. 7001.0190. A **person** to whom the permit has been transferred must comply with the conditions of the permit (Minn. R. 7001.0150, subp. 3, item N).

O. The permit authorizes the **Permittee** to perform the activities described in the permit under the conditions of the permit. In issuing the permit, the state and **Agency** assume no responsibility for damage to **person**s, property, or the environment caused by the activities of the **Permittee** in the conduct of its actions, including those activities authorized, directed, or undertaken under the permit. To the extent the state and **Agency** may be liable for the activities of its employees, that liability is explicitly limited to that provided in the Tort Claims Act, Minn. Stat. § 3.736 (Minn. R. 7001.0150, subp. 3, item O).

P. This permit incorporates by reference the applicable portions of 40 CFR §§ 122.41 and 122.42(c) and (d), and Minn. R. 7001.1090, which are enforceable parts of this permit.

Q. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

APPENDIX A: DEFINITIONS, ABBREVIATIONS, AND ACRONYMS

The definitions and abbreviations in this part are for purposes of this permit only.

1. "**Active karst**" means geographic areas underlain by carbonate bedrock (or other forms of bedrock that can erode or dissolve) with less than 50 feet of sediment cover.

2. "**Alum or Ferric Chloride Phosphorus Treatment System**" means the diversion of flowing **stormwater** from a **MS4**, removal of phosphorus through the use a continuous feed of alum or ferric chloride additive, flocculation, and the return of the treated **stormwater** back into a **MS4** or **receiving water**.

3. "**Agency**" means Minnesota Pollution Control **Agency** (Minn. Stat. § 116.36, subd. 2).

4. "**Applicable WLA**" means a **Waste Load Allocation** assigned to the **Permittee** and approved by the **USEPA**.

5. "**Best Management Practice**" or "**BMP**" means practices to prevent or **reduce** the pollution of the **waters of the state**, including schedules of activities, prohibitions of practices, and other management practices, and also includes treatment requirements, operating procedures and practices to control plan site runoff, spillage or leaks, sludge, or waste disposal or drainage from raw material storage (Minn. R. 7001.1020, subp. 5).

6. "**Commissioner**" means the **Commissioner** of the Minnesota Pollution Control **Agency** or the **Commissioner**'s designee (Minn. Stat. § 116.36, subd. 3).

7. "**Common plan of development or sale**" means one proposed plan for a contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur.

8. "**Construction activity**" includes **construction activity** as defined in 40 CFR § 122.26(b)(14)(x) and small **construction activity** as defined in 40 CFR § 122.26(b)(15) and **construction activity** as defined by Minn. R. 7090.0080, subp. 4. This includes a disturbance to the land that results in a change in the topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated **stormwater** runoff, leading to soil erosion and movement of sediment into **surface waters** or drainage systems. Examples of **construction activity** may include clearing, grading, filling, and excavating. **Construction activity** includes the disturbance of less than one acre of total land area that is a part of a larger **common plan of development or sale** if the larger common plan will ultimately disturb one (1) acre or more. **Construction activity** does not include a disturbance to the land of less than five (5) acres for the purpose of routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility. Routine maintenance does not include activities such as repairs, replacement and other types of non-routine maintenance. Pavement rehabilitation (e.g., mill and overlay projects) is not considered **construction activity**.

9. "**Discharge**" means "discharge of a pollutant" as defined in Minn. R. 7001.1020, subp. 12.

10. "**DNR catchment area**" means the Hydrologic Unit 08 areas delineated and digitized by the Minnesota DNR. The catchment areas are available for download at the Minnesota DNR Data Deli website. **DNR catchment area**s may be locally corrected, in which case the local corrections may be used.

11. "**Green infrastructure**" means a wide array of practices at multiple scales that manage wet weather and that maintains or restores natural hydrology by infiltrating, evapotranspiring, or harvesting and using **stormwater**. On a regional scale, green infrastructure is the preservation or restoration of natural landscape features, such as forests, floodplains and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale, green infrastructure consists of site and neighborhood-specific practices, such as bioretention, trees, green roofs, permeable pavements and cisterns.

12. "**Illicit discharge**" means any discharge to a **municipal separate storm sewer** that is not composed entirely of **stormwater** except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the **municipal separate storm sewer**) and discharges resulting from firefighting activities (40 CFR § 122.26[b][2]).

13. "**Impaired water**" means waters identified as impaired by the **Agency**, and approved by the **USEPA**, pursuant to section 303(d) of the Clean Water Act (33 U.S.C. § 1313 [d]).

14. **"Impervious Surface"** means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, driveways, parking lots, and concrete, asphalt, or gravel roads. Bridges over surface waters are impervious surfaces.

15. "**Large municipal separate storm sewer system**" or "**Large MS4**" means all municipal separate storm sewers that are located in an incorporated place with a population of 250,000 or more owned or operated by the United States, a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, **stormwater**, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management Agency under section 208 of the CWA that discharges to waters of the United States.

16. "**Linear Project**" means construction or reconstruction of roads, trails, sidewalks, or rail lines that are not part of a common plan of development or sale. Rehabilitation is not considered reconstruction. Rehabilitation includes mill and overlay and other resurfacing activities within existing right-of-way that do not expose underlying soils.

17. "**Long-term goals**" means those goals established in the **Permittee**'s **stormwater** management program to be accomplished by implementing the NPDES Phase I **MS4** Permit. These goals may have various timeframes and durations including durations longer than one NPDES Phase I **MS4** permit cycle. For example, **long-term goals** may include, but are not limited to, compliance with all **TMDL**s by January 1, 2025; fifty percent (50%) reduction of the annual frequency of street flooding by January 1, 2020; and/or reduction of impervious cover by two percent (2%) within two years of the issuance date of the **SWMP**.

18. "**Maximum Extent Practicable**" or "**MEP**" means the statutory standard (33 U.S.C. § 1342[p][3][B][iii]) that establishes the level of pollutant reductions that an **owner** or **operator** of a regulated **MS4**s must achieve. The **USEPA** has intentionally not provided a precise definition of **MEP** to allow maximum flexibility in **MS4** permitting. The pollutant reductions that represent **MEP** may be different for each **MS4**, given the unique local hydrologic and geologic concerns that may exist and the differing pollutant control strategies. Therefore, the **Permittee** will determine appropriate **BMP**s to satisfy each of the MCMs through an evaluative process. The **USEPA** envisions application of the **MEP** standard as an iterative process.

19. "**Municipal separate storm sewer system**" or "**MS4**" means a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains:

    a. Owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, **stormwate**r, or other wastes, including special districts under state law such as a sewer district, flood control district, or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management Agency under section 208 of the federal Clean Water Act, United States Code, Title 33, section 1288, that discharges into **waters of the state**.

    b. Designed or used for collecting or conveying **stormwater**.

    c. That is not a combined sewer.

    d. That is not part of a Public Owned Treatment Works as defined at 40 CFR § 122.2.

    Municipal separate storm sewer systems do not include separate storm sewers in very discrete areas, such as individual buildings (Minn. R. 7090.0080, subp. 8).

20. "**New development**" means all **construction activity** that is not defined as **redevelopment**.

21. "**Non-stormwater discharge**" means any **discharge** not composed entirely of **stormwater**.

22. "**Other regulatory mechanism**" means any legally enforceable document, such as a contract or other agreement that has penalties such as withholding payments, fines, or other measures to prevent noncompliance.

23. "**Operator**" means the **person** with primary operational control and legal responsibility for **the municipal separate storm sewer system** (Minn. R. 7090.0080, subp. 10).

24. "**Outfall**" means the point source where a **municipal separate storm sewer system discharge**s to a **receiving water**, or the **stormwater discharge** permanently leaves the **Permittee**'s **MS4**. It does not include diffuse runoff or conveyances which connect segments of the same stream or water systems (e.g., when a conveyance temporarily leaves a **MS4** at a road crossing).

25. "**Owner**" means the **person** that owns the **municipal separate storm sewer system** (Minn. R. 7090.0080, subp. 11).

26. "**Permittee**" means a **person** or **person**s, that signs the permit application submitted to the **Agency** and is responsible for compliance with the terms and conditions of this permit.

27. "**Person**" means the state or any Agency or institution thereof, any municipality, governmental subdivision, public or private corporation, individual, partnership, or other entity, including, but not limited to, association, commission, or any interstate body, and includes any officer or governing or managing body of any municipality, governmental subdivision, or public or private corporation, or other entity (Minn. Stat. § 115.01, subd. 10).

28. "**Pipe**" means a closed human-made conveyance device used to transport **stormwater** from location to location. The definition of **pipe** does not include foundation drain **pipe**s, irrigation **pipe**s, land drain tile **pipe**s, culverts, and road sub-grade drain **pipe**s.

29. "**Pollutant of concern**" means a pollutant specifically identified in a **USEPA**-approved **TMDL** report as causing a water quality impairment.

30. "**Receiving water**" means any lake, river, stream or **wetland** that receives **stormwater** discharges from a **MS4**.

31. "**Redevelopment**" means any **construction activity** where, prior to the start of construction, the areas to be disturbed have 15 percent or more of **impervious surface**(s).

32. "**Reduce**" means **reduce** to the **Maximum Extent Practicable** (**MEP**) unless otherwise defined in the context in which it is used.

33. "**Seasonally saturated soil**" means the highest seasonal elevation in the soil that is in a reduced chemical state because of soil voids being filled with water causing anaerobic conditions. **Seasonally saturated soil** is evident by the presence of redoximorphic features or other information determined by scientifically established methods or empirical field measurements.

34. "**Significant materials**" includes, but is not limited to: raw materials, fuels, materials such as solvents, detergents, and plastic pellets: finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA); fertilizers, pesticides, and waste products such as ashes, slag, and sludge that have the potential to be released with **stormwater** discharges. When determining whether a material is significant, the physical and chemical characteristics of the material should be considered (e.g., the material's solubility, transportability, and toxicity characteristics) to determine the material's pollution potential (40 CFR § 122.26[b][12]).

35. "**Stormwater**" means **stormwater** runoff, snowmelt runoff, surface runoff, and drainage (Minn. R. 7090.0080, subp. 12).

36. "**Stormwater hotspot**" means any land use or activity that may generate a higher concentration of hydrocarbons, trace metals, or toxic pollutants than are found in typical **stormwater** runoff.

37. "**Stormwater Management Program**" or "**SWMP**" means a comprehensive program developed by the **Permittee** to manage and reduce the discharge of pollutants in **stormwater** to and from the medium or **large MS4**.

38. "**Structural stormwater BMP**" means a stationary and permanent **BMP** that is designed, constructed and operated to prevent or **reduce** the discharge of pollutants in **stormwater**.

39. "**Total Maximum Daily Load**" or "**TMDL**" means the sum of the individual **Waste Load Allocations** for point sources and load allocations for nonpoint sources and natural background, as more fully defined in 40 CFR § 130.2, paragraph (i). A **TMDL** sets and allocates the maximum amount of a pollutant that may be introduced into a **water of the state** and still assure attainment and maintenance of **water quality standards** (Minn. R. 7052.0010 subp. 42).

40. "**USEPA**" means the U.S. Environmental Protection Agency.

41. "**Waste Load Allocation**" or "**WLA**" means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution, as more fully defined in 40 CFR § 130.2(h). In the absence of a **TMDL** approved by **USEPA** under 40 CFR § 130.7, or an assessment and remediation plan developed and approved according to Minn. R. 7052.0200, subp. 1.C, a **WLA** is the allocation for an individual point source that ensures that the level of water quality to be achieved by the point source is derived from and complies with all applicable **water quality standards** and criteria (Minn. R. 7052.0010 subp. 45).

42. "**Water pollution**" means:

    a. The discharge of any pollutants into any waters of the state or the contamination of any waters of the state so as to create a nuisance or renders such waters unclean, or noxious, or impure so as to be actually or potentially harmful or detrimental or injurious to public health, safety or welfare, to domestic, agricultural, commercial, industrial, recreational or other legitimate uses, or to livestock, animals, birds, fish, or other aquatic life.

    b. The alteration made or induced by human activity of the chemical, physical, biological, or radiological integrity of waters of the state (Minn. Stat. § 115.01, subd. 13(b)).

43. "**Water quality standards**" mean those provisions contained in Minn. R. 7050 and 7052.

44. "**Waters of the state**" means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof (Minn. Stat. § 115.01, subd. 22).

45. "**Water Quality Volume**" means (by type of project):

    a. for **new development** or **redevelopment** projects (excluding **linear project**s) the **water quality volume** equals one (1) inch times the new and/or fully reconstructed **impervious surface**s (calculated as an instantaneous volume) and is the volume of water to be treated, through the use of any combination of **BMP**s, as required by this permit; or

    b. for **linear project**s, the **water quality volume** equals one (1) inch times the net increase of **impervious surface**s, in addition to a reduction in **stormwater** runoff volume from fully reconstructed surfaces (calculated as an instantaneous volume) and is the volume of water to be treated, through the use of any combination of BMPs, as required by this permit.

46. "**Wetlands**" are those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. **Wetlands** generally include swamps, marshes, bogs, and similar areas. Constructed **wetlands** designed for wastewater treatment are not **waters of the state**. **Wetlands** must have the following attributes:

    a. A predominance of hydric soils.

    b. Inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition.

    c. Under normal circumstances, support a prevalence of such vegetation (Minn. R. 7050.0186, subp. 1a.B.).

ABBREVIATIONS AND ACRONYMS

BMP – Best Management Practice
CFR – Code of Federal Regulations
CWA – Clean Water Act
DNR – Department of Natural Resources
DWSMA – Drinking Water Supply Management Area
ERA – Emergency Response Area
ERPs – Enforcement Response Procedures
IDDE – Illicit Discharge Detection and Elimination
MCM – Minimum Control Measure
MEP – Maximum Extent Practicable
Mgd – Million gallons/day
Mg/L – Milligrams/liter
MPCA – Minnesota Pollution Control Agency
MS4 – Municipal Separate Storm Sewer System
NPDES – National Pollutant Discharge Elimination System
SARA – Superfund Amendments and Reauthorization Act of 1986
SDS – State Disposal System
SU – Standard Units
SWMP – Stormwater Management Program
TMDL – Total Maximum Daily Load
TP – Total Phosphorus
TSS – Total Suspended Solids
USEPA – United States Environmental Protection Agency
WLA – Waste Load Allocation