|  |  |
| --- | --- |
| Minnesota Pollution Control Agency (MPCA), 520 Lafayette Road North, St. Paul, MN 55155-4194 | MS4 audit report  Municipal Separate Storm  Sewer Systems (MS4) Program  *Doc Type: Permit Approval* |

Audit information

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| MS4 permittee: |  | | | Date of audit (mm/dd/yyyy): | |  |
| Permittee contact name: | |  | MPCA evaluator: | |  | |
| Contact title: |  | | Evaluator title: | |  | |
| Contact phone: |  | | Evaluator phone: | |  | |
| Contact email: |  | | Evaluator email: | |  | |

**Audit participants**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Title** | **Phone** | **Email** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

MS4 program area – Mapping (Section 14)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **C = Compliant N = Noncompliant NI = Not inspected NA = Not** **Applicable** | **C** | **N** | **NI** | **NA** |
| 14.2 | New permittees must develop, and existing permittees must update, as necessary, a storm sewer system map that depicts the following: |  |  |  |  |
|  | 1. the permittee's entire MS4 as a goal, but at a minimum, all pipes 12 inches or greater in diameter, including stormwater flow direction in those pipes; |  |  |  |  |
|  | 1. outfalls, including a unique identification (ID) number assigned by the permittee, and an associated geographic coordinates; |  |  |  |  |
|  | 1. structural stormwater BMPs that are part of the permittee's MS4; and |  |  |  |  |
|  | 1. all receiving waters. |  |  |  |  |

MS4 program area – MCM\* 1: public education and outreach (Section 16)

| **Item** | **C = Compliant N = Noncompliant NI = Not inspected NA = Not** **Applicable** | **C** | **N** | **NI** | **NA** |
| --- | --- | --- | --- | --- | --- |
| 16.3 | During the permit term, the permittee must distribute educational materials or equivalent outreach focused on at least two (2) specifically selected stormwater-related issues of high priority to the permittee (e.g., specific TMDL reduction targets, changing local business practices, promoting adoption of residential BMPs, lake improvements through lake associations, household chemicals, yard waste, etc.). The topics must be different from those described in items 16.4 through 16.6. |  |  |  |  |
| 16.4 | At least once each calendar year, the permittee must distribute educational materials or equivalent outreach focused on illicit discharge recognition and reporting illicit discharges to the permittee. |  |  |  |  |
| 16.5 | For cities and townships, at least once each calendar year, the permittee must distribute educational materials or equivalent outreach to residents, businesses, commercial facilities, and institutions, focused on the following: |  |  |  |  |
|  | 1. impacts of deicing salt use on receiving waters; |  |  |  |  |
|  | 1. methods to reduce deicing salt use; and |  |  |  |  |
|  | 1. proper storage of salt or other deicing materials. |  |  |  |  |
| 16.6 | For cities and townships, at least once each calendar year, the permittee must distribute educational materials or equivalent outreach focused on pet waste. The educational materials or equivalent outreach must include information on the following: |  |  |  |  |
|  | 1. impacts of pet waste on receiving waters; |  |  |  |  |
|  | 1. proper management of pet waste; and |  |  |  |  |
|  | 1. any existing permittee regulatory mechanism(s) for pet waste. |  |  |  |  |
| 16.7 | The permittee must develop and implement an education and outreach plan that consists of the following: |  |  |  |  |
|  | 1. target audience(s) (e.g., residents, businesses, commercial facilities, institutions, and local organizations; consideration should be given to low-income residents, people of color, and non-native English speaking residents. A resource to help identify these areas is available on the Agency's environmental justice website); |  |  |  |  |
| 1. name or position title of responsible person(s) in charge of overall plan implementation; |  |  |  |  |
| 1. specific activities and schedules to reach each target audience; and |  |  |  |  |
| 1. a description of any coordination with and/or use of other stormwater education and outreach programs implemented by other entities, if applicable. |  |  |  |  |
| 16.8 | The permittee must document the following information: |  |  |  |  |
| 1. a description of all specific stormwater-related issues identified by the permittee in item 16.3; |  |  |  |  |
| 1. all information required under the permittee's education and outreach plan in item 16.7; |  |  |  |  |
| 1. activities held, including dates, to reach each target audience; |  |  |  |  |
| 1. quantities and descriptions of educational materials distributed, including dates distributed; and |  |  |  |  |
| 1. estimated audience (e.g., number of participants, viewers, readers, listeners, etc.) for each completed education and outreach activity. |  |  |  |  |
| 16.9 | The permittee must conduct an annual assessment of the public education program to evaluate program compliance, the status of achieving the measurable requirements in Section 16, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., education and outreach efforts, implementation of written plans, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. |  |  |  |  |

## ***\*MCM = Minimum Control Measure***

|  |
| --- |
| **Comments:** |
|  |
| **Recommended actions:** |
|  |
| **Required corrective actions:** |
|  |

MS4 program area – MCM 2: public participation/involvement (Section 17)

| **Item** | **C = Compliant N = Noncompliant NI = Not inspected NA = Not** **Applicable** | **C** | **N** | **NI** | **NA** |
| --- | --- | --- | --- | --- | --- |
| 17.3 | Each calendar year, the permittee must provide a minimum of one (1) opportunity for the public to provide input on the adequacy of the SWPPP. The permittee may conduct a public meeting(s) to satisfy this requirement, provided appropriate local public notice requirements are followed and the public is given the opportunity to review and comment on the SWPPP. |  |  |  |  |
| 17.4 | The permittee must provide access to the SWPPP Document, annual reports, and other documentation that supports or describes the SWPPP (e.g., regulatory mechanism(s), etc.) for public review, upon request. All public data requests are subject to the Minnesota Government Data Practices Act, Minn. Stat. 13. |  |  |  |  |
| 17.5 | The permittee must consider oral and written input regarding the SWPPP submitted by the public to the permittee. |  |  |  |  |
| 17.6 | Each calendar year, the permittee must provide a minimum of one (1) public involvement activity that includes a pollution prevention or water quality theme (e.g., rain barrel distribution event, rain garden workshop, cleanup event, storm drain stenciling, volunteer water quality monitoring, adopt a storm drain program, household hazardous waste collection day, etc.). |  |  |  |  |
| 17.7 | The permittee must document the following information: |  |  |  |  |
| 1. all relevant written input submitted by persons regarding the SWPPP; |  |  |  |  |
| 1. all responses from the permittee to written input received regarding the SWPPP, including any modifications made to the SWPPP as a result of written input received; |  |  |  |  |
| 1. date(s), location(s), and estimated number of participants at events held for purposes of compliance with item 17.3; |  |  |  |  |
| 1. notices provided to the public of any events scheduled to meet item 17.3, including any electronic correspondence (e.g., website, e-mail distribution lists, notices, etc.); and |  |  |  |  |
|  | 1. date(s), location(s), description of activities, and estimated number of participants at events held for the purpose of compliance with item 17.6. |  |  |  |  |
| 17.8 | The permittee must conduct an annual assessment of the Public Participation/Involvement program to evaluate program compliance, the status of achieving the measurable requirements in Section 17, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., public input and involvement opportunities, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. |  |  |  |  |

|  |
| --- |
| **Comments:** |
|  |
| **Recommended actions:** |
|  |
| **Required corrective actions:** |
|  |

MS4 program area – MCM 3: illicit discharge detection and elimination (Section 18)

| **Item** | **C = Compliant N = Noncompliant NI = Not inspected NA = Not** **Applicable** | **C** | **N** | **NI** | **NA** |
| --- | --- | --- | --- | --- | --- |
| 18.3 | The permittee must maintain a map of the permittee's MS4, as required in Section 14. |  |  |  |  |
| 18.4 | To the extent allowable under state or local law, the permittee must develop, implement, and enforce a regulatory mechanism(s) that prohibits non-stormwater discharges into the permittee's MS4, except those non-stormwater discharges authorized in item 3.2. A regulatory mechanism(s) for the purposes of the General Permit may consist of contract language, an ordinance, permits, standards, written policies, operational plans, legal agreements, or any other mechanism, that will be enforced by the permittee. The regulatory mechanism(s) must also include items 18.5 and 18.6, as applicable. |  |  |  |  |
| 18.5 | For cities, townships, and counties, the permittee's regulatory mechanism(s) must require owners or custodians of pets to remove and properly dispose of feces on permittee owned land areas. |  |  |  |  |
| 18.6 | For cities and townships, the regulatory mechanism(s) must require proper salt storage at commercial, institutional, and non-NPDES permitted industrial facilities. At a minimum, the regulatory mechanism(s) must require the following: |  |  |  |  |
|  | 1. designated salt storage areas must be covered or indoors; |  |  |  |  |
|  | 1. designated salt storage areas must be located on an impervious surface; and |  |  |  |  |
|  | 1. implementation of practices to reduce exposure when transferring material in designated salt storage areas (e.g., sweeping, diversions, and/or containment). |  |  |  |  |
| 18.7 | The permittee must incorporate illicit discharge detection into all inspection and maintenance activities conducted in items 21.9, 21.10, and 21.11. Where feasible, the permittee must conduct illicit discharge inspections during dry-weather conditions (e.g., periods of 72 or more hours of no precipitation). |  |  |  |  |
| 18.8 | At least once each calendar year, the permittee must train all field staff in illicit discharge recognition (including conditions which could cause illicit discharges), and reporting illicit discharges for further investigation. Field staff includes, but is not limited to, police, fire department, public works, and parks staff. Training for this specific requirement may include, but is not limited to, videos, in-person presentations, webinars, training documents, and/or emails. |  |  |  |  |
| 18.9 | The permittee must ensure that individuals receive training commensurate with their responsibilities as they relate to the permittee's IDDE program. Individuals includes, but is not limited to, individuals responsible for investigating, locating, eliminating illicit discharges, and/or enforcement. The permittee must ensure that previously trained individuals attend a refresher-training every three (3) calendar years following the initial training. |  |  |  |  |
| 18.10 | The permittee must maintain a written or mapped inventory of priority areas the permittee identifies as having a higher likelihood for illicit discharges. At a minimum, the permittee must evaluate the following for potential inclusion in the inventory:  a. land uses associated with business/industrial activities; b. areas where illicit discharges have been identified in the past; and c. areas with storage of significant materials that could result in an illicit discharge. |  |  |  |  |
| 18.11 | To the extent allowable under state or local law, the permittee must conduct additional illicit discharge inspections in areas identified in item 18.10. |  |  |  |  |
| 18.12 | The permittee must implement written procedures for investigating, locating, and eliminating the source of illicit discharges. At a minimum, the written procedures must include: |  |  |  |  |
| 1. a timeframe in which the permittee will investigate a reported illicit discharge; |  |  |  |  |
| 1. use of visual inspections to detect and track the source of an illicit discharge; |  |  |  |  |
| 1. tools available to the permittee to investigate and locate an illicit discharge (e.g., mobile cameras, collecting and analyzing water samples, smoke testing, dye testing, etc.); |  |  |  |  |
|  | 1. cleanup methods available to the permittee to remove an illicit discharge or spill; and |  |  |  |  |
|  | 1. name or position title of responsible person(s) for investigating, locating, and eliminating an illicit discharge. |  |  |  |  |
| 18.13 | The permittee must implement written procedures for responding to spills, including emergency response procedures to prevent spills from entering the MS4. The written procedures must also include the immediate notification of the Minnesota Department of Public Safety Duty Officer at 1-800-422-0798 (toll free) or 651-649-5451 (Metro area), if the source of the illicit discharge is a spill or leak as defined in Minn. Stat. 115.061. |  |  |  |  |
| 18.14 | The permittee must maintain written enforcement response procedures (ERPs) to compel compliance with the permittee's regulatory mechanism(s) in Section 18. At a minimum, the written ERPs must include: |  |  |  |  |
|  | 1. a description of enforcement tools available to the permittee and guidelines for the use of each tool; |  |  |  |  |
|  | 1. timeframes to complete corrective actions; and |  |  |  |  |
|  | 1. name or position title of responsible person(s) for conducting enforcement. |  |  |  |  |
| 18.15 | The permittee must document the following information: |  |  |  |  |
| 1. date(s) and location(s) of IDDE inspections conducted in accordance with items 18.7 and 18.11; |  |  |  |  |
| 1. reports of alleged illicit discharges received, including date(s) of the report(s), and any follow-up action(s) taken by the permittee; |  |  |  |  |
| 1. date(s) of discovery of all illicit discharges; |  |  |  |  |
| 1. identification of outfalls, or other areas, where illicit discharges have been discovered; |  |  |  |  |
| 1. sources (including a description and the responsible party) of illicit discharges (if known); and |  |  |  |  |
|  | 1. action(s) taken by the permittee, including date(s), to address discovered illicit discharges. |  |  |  |  |
| 18.16 | For each training in item 18.8 and 18.9, the permittee must document: |  |  |  |  |
|  | 1. general subject matter covered; |  |  |  |  |
|  | 1. names and departments of individuals in attendance; and |  |  |  |  |
|  | 1. date of each event. |  |  |  |  |
| 18.17 | The permittee must document any enforcement conducted pursuant to the ERPs in item 18.14, including verbal warnings. At a minimum, the permittee must document the following: |  |  |  |  |
|  | 1. name of the person responsible for violating the terms and conditions of the permittee's regulatory mechanism(s); |  |  |  |  |
|  | 1. date(s) and location(s) of the observed violation(s); |  |  |  |  |
|  | 1. description of the violation(s); |  |  |  |  |
|  | 1. corrective action(s) (including completion schedule) issued by the permittee; |  |  |  |  |
|  | 1. referrals to other regulatory organizations (if any); and |  |  |  |  |
|  | 1. date(s) violation(s) resolved. |  |  |  |  |
| 18.18 | The permittee must conduct an annual assessment of the IDDE program to evaluate program compliance, the status of achieving the measurable requirements in Section 18, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., trainings, inventory, inspections, enforcement, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. |  |  |  |  |

|  |
| --- |
| **Comments:** |
|  |
| **Recommended actions:** |
|  |
| **Required corrective actions:** |
|  |

MS4 program area – MCM 4: construction site stormwater runoff control (Section 19)

| **Item** | **C = Compliant N = Noncompliant NI = Not inspected NA = Not** **Applicable** | **C** | **N** | **NI** | **NA** |
| --- | --- | --- | --- | --- | --- |
| 19.3 | To the extent allowable under state or local law, the permittee must develop, implement, and enforce a regulatory mechanism(s) that establishes requirements for erosion, sediment, and waste controls that is at least as stringent as the Agency's most current Construction Stormwater General Permit (MNR100001), herein referred to as the CSW Permit. A regulatory mechanism(s) for the purposes of the General Permit may consist of contract language, an ordinance, permits, standards, written policies, operational plans, legal agreements, or any other mechanism, that will be enforced by the permittee.  *Note: If marked Noncompliant (N), see* ***Appendix A*** *at the end of this document for details.* |  |  |  |  |
| 19.4 | When the CSW Permit is reissued, the permittee must revise their regulatory mechanism(s), if necessary, within 12 months of the issuance date of that permit, to be at least as stringent as the requirements for erosion, sediment, and waste controls described in the CSW Permit. |  |  |  |  |
| 19.5 | The permittee's regulatory mechanism(s) must require that owners and operators of construction activity develop site plans that must be submitted to the permittee for review and confirmation that regulatory mechanism(s) requirements have been met, prior to the start of construction activity. The regulatory mechanism(s) must require the owners and operators of construction activity to keep site plans up-to-date with regard to stormwater runoff controls. The regulatory mechanism(s) must require that site plans incorporate the following erosion, sediment, and waste controls that are at least as stringent as described in the CSW Permit:  a. erosion prevention practices; b. sediment control practices; c. dewatering and basin draining; d. inspection and maintenance; e. pollution prevention management measures; f. temporary sediment basins; and g. termination conditions.  *Note: If marked Noncompliant (N), see* ***Appendix A*** *at the end of this document for details.* |  |  |  |  |
| 19.6 | The permittee must implement written procedures for site plan reviews conducted by the permittee prior to the start of all construction activity, to ensure compliance with requirements of the regulatory mechanism(s). At a minimum, the procedures must include: |  |  |  |  |
|  | 1. written notification to owners and operators proposing construction activity, including projects less than one acre that are part of a larger common plan of development or sale, of the need to apply for and obtain coverage under the CSW Permit; and |  |  |  |  |
|  | 1. use of a written checklist, consistent with the requirements of the regulatory mechanism(s), to document the adequacy of each site plan required in item 19.5. |  |  |  |  |
| 19.7 | The permittee must implement an inspection program that includes written procedures for conducting site inspections, to determine compliance with the permittee's regulatory mechanism(s). The inspection program must also meet the requirements in items 19.8 and 19.9. |  |  |  |  |
| 19.8 | The permittee must maintain written procedures for identifying high-priority and low-priority sites for inspection. At a minimum, the written procedures must include: |  |  |  |  |
|  | 1. a detailed explanation describing how sites will be categorized as either high-priority or low-priority; |  |  |  |  |
|  | 1. a frequency at which the permittee will conduct inspections for high-priority sites; |  |  |  |  |
|  | 1. a frequency at which the permittee will conduct inspections for low-priority sites; and |  |  |  |  |
|  | 1. the name(s) of individual(s) or position title(s) responsible for conducting site inspections. |  |  |  |  |
| 19.9 | The permittee must implement a written checklist to document each site inspection when determining compliance with the permittee's regulatory mechanism(s). At a minimum, the checklist must include the permittee's inspection findings on the following areas, as applicable to each site: |  |  |  |  |
|  | 1. stabilization of exposed soils (including stockpiles); |  |  |  |  |
|  | 1. stabilization of ditch and swale bottoms; |  |  |  |  |
|  | 1. sediment control BMPs on all downgradient perimeters of the project and upgradient of buffer zones; |  |  |  |  |
|  | 1. storm drain inlet protection; |  |  |  |  |
|  | 1. energy dissipation at pipe outlets; |  |  |  |  |
|  | 1. vehicle tracking BMPs; |  |  |  |  |
|  | 1. preservation of a 50 foot natural buffer or redundant sediment controls where stormwater flows to a surface water within 50 feet of disturbed soils; |  |  |  |  |
|  | 1. owner/operator of construction activity self-inspection records; |  |  |  |  |
|  | 1. containment for all liquid and solid wastes generated by washout operations (e.g., concrete, stucco, paint, form release oils, curing compounds, and other construction materials); and |  |  |  |  |
|  | 1. BMPs maintained and functional. |  |  |  |  |
| 19.10 | The permittee must implement written procedures for receipt and consideration of reports of noncompliance or other stormwater related information on construction activity submitted by the public to the permittee. |  |  |  |  |
| 19.11 | The permittee must ensure that individuals receive training commensurate with their responsibilities as they relate to the permittee's Construction Site Stormwater Runoff Control program. Individuals includes, but is not limited to, individuals responsible for conducting site plan reviews, site inspections, and/or enforcement. The permittee must ensure that previously trained individuals attend a refresher-training every three (3) calendar years following the initial training. |  |  |  |  |
| 19.12 | The permittee must maintain written enforcement response procedures (ERPs) to compel compliance with the permittee's regulatory mechanism(s) in item 19.3. At a minimum, the written ERPs must include: |  |  |  |  |
|  | 1. a description of enforcement tools available to the permittee and guidelines for the use of each tool; and |  |  |  |  |
|  | 1. name or position title of responsible person(s) for conducting enforcement. |  |  |  |  |
| 19.13 | For each site plan review conducted by the permittee, the permittee must document the following: |  |  |  |  |
|  | 1. project name; |  |  |  |  |
|  | 1. location; |  |  |  |  |
|  | 1. total acreage to be disturbed; |  |  |  |  |
|  | 1. owner and operator of the proposed construction activity; |  |  |  |  |
|  | 1. proof of notification to obtain coverage under the CSW Permit, as required in item 19.6, or proof of coverage under the CSW Permit; and |  |  |  |  |
|  | 1. any stormwater related comments and supporting completed checklist, as required in item 19.6, used by the permittee to determine project approval or denial. |  |  |  |  |
| 19.14 | For each training in item 19.11, the permittee must document: |  |  |  |  |
|  | 1. general subject matter covered; |  |  |  |  |
|  | 1. names and departments of individuals in attendance; and |  |  |  |  |
|  | 1. date of each event. |  |  |  |  |
| 19.15 | The permittee must document any enforcement conducted pursuant to the ERPs in item 19.12, including verbal warnings. At a minimum, the permittee must document the following: |  |  |  |  |
| 1. name of the person responsible for violating the terms and conditions of the permittee's regulatory mechanism(s); |  |  |  |  |
| 1. date(s) and location(s) of the observed violation(s); |  |  |  |  |
| 1. description of the violation(s); |  |  |  |  |
| 1. corrective action(s) (including completion schedule) issued by the permittee; |  |  |  |  |
| 1. referrals to other regulatory organizations (if any); and |  |  |  |  |
| 1. date(s) violation(s) resolved. |  |  |  |  |
| 19.16 | The permittee must conduct an annual assessment of the Construction Site Stormwater Runoff Control program to evaluate program compliance, the status of achieving the measurable requirements in Section 19, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., inventory, trainings, site plan reviews, inspections, enforcement, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. |  |  |  |  |

|  |
| --- |
| **Comments:** |
|  |
| **Recommended actions:** |
|  |
| **Required corrective actions:** |
|  |

MS4 program area – MCM 5: post-construction stormwater management (Section 20)

| **Item** | **C = Compliant N = Noncompliant NI = Not inspected NA = Not** **Applicable** | **C** | **N** | **NI** | **NA** |
| --- | --- | --- | --- | --- | --- |
| 20.3 | To the extent allowable under state or local law, the permittee must develop, implement, and enforce a regulatory mechanism(s) that incorporates items 20.4 through 20.15. A regulatory mechanism(s) for the purposes of the General Permit may consist of contract language, an ordinance, permits, standards, written policies, operational plans, legal agreements, or any other mechanism, that will be enforced by the permittee. |  |  |  |  |
| 20.4 | The permittee's regulatory mechanism(s) must require owners of construction activity to submit site plans with post-construction stormwater management BMPs designed with accepted engineering practices to the permittee for review and confirmation that regulatory mechanism(s) requirements have been met, prior to start of construction activity. |  |  |  |  |
| 20.5 | The permittee's regulatory mechanism(s) must require owners of construction activity to treat the water quality volume on any project where the sum of the new impervious surface and the fully reconstructed impervious surface equals one or more acres. |  |  |  |  |
| 20.6 | For construction activity (excluding linear projects), the water quality volume must be calculated as one (1) inch times the sum of the new and the fully reconstructed impervious surface. |  |  |  |  |
| 20.7 | For linear projects, the water quality volume must be calculated as the larger of one (1) inch times the new impervious surface or one-half (0.5) inch times the sum of the new and the fully reconstructed impervious surface. Where the entire water quality volume cannot be treated 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. Volume reduction practices must be considered first, as described in item 20.8. Volume reduction practices are not required if the practices cannot be provided cost effectively. If additional right-of-way, easements, or other permission cannot be obtained, owners of construction activity must maximize the treatment of the water quality volume prior to discharge from the MS4. |  |  |  |  |
| 20.8 | Volume reduction practices (e.g., infiltration or other) to retain the water quality volume on-site must be considered first when designing the permanent stormwater treatment system. The General Permit does not consider wet sedimentation basins and filtration systems to be volume reduction practices. If the General Permit prohibits infiltration as described in item 20.9, other volume reduction practices, a wet sedimentation basin, or filtration basin may be considered. |  |  |  |  |
| 20.9 | Infiltration systems must be prohibited when the system would be constructed in areas: |  |  |  |  |
|  | 1. that receive discharges from vehicle fueling and maintenance areas, regardless of the amount of new and fully reconstructed impervious surface; |  |  |  |  |
|  | 1. where high levels of contaminants in soil or groundwater may be mobilized by the infiltrating stormwater. To make this determination, the owners and/or operators 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; |  |  |  |  |
|  | 1. 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; |  |  |  |  |
|  | 1. 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; |  |  |  |  |
|  | 1. of predominately Hydrologic Soil Group D (clay) soils; |  |  |  |  |
|  | 1. in an Emergency Response Area (ERA) within a Drinking Water Supply Management Area (DWSMA) as defined in Minn. R. 4720.5100, Subp. 13, classified as high or very high vulnerability as defined by the Minnesota Department of Health; |  |  |  |  |
|  | 1. in an ERA within a DWSMA classified as moderate vulnerability 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; |  |  |  |  |
|  | 1. outside of an ERA within a DWSMA classified as high or very high vulnerability 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; |  |  |  |  |
|  | 1. within 1,000 feet up-gradient or 100 feet down gradient of active karst features; or |  |  |  |  |
|  | 1. that receive stormwater runoff from these types of 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. |  |  |  |  |
| 20.10 | For non-linear projects, where the water quality volume cannot cost effectively be treated on the site of the original construction activity, the permittee must identify, or may require owners of the construction activity to identify, locations where off-site treatment projects can be completed. If the entire water quality volume is not addressed on the site of the original construction activity, the remaining water quality volume must be addressed through off-site treatment and, at a minimum, ensure the requirements of items 20.11 through 20.14 are met. |  |  |  |  |
| 20.11 | The permittee must ensure off-site treatment 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; |  |  |  |  |
|  | 1. locations within the same Department of Natural Resource (DNR) catchment area as the original construction activity; |  |  |  |  |
|  | 1. locations in the next adjacent DNR catchment area up-stream; or |  |  |  |  |
|  | 1. locations anywhere within the permittee's jurisdiction. |  |  |  |  |
| 20.12 | Off-site treatment projects must involve the creation of new structural stormwater BMPs or the retrofit of existing structural stormwater BMPs, or the use of a properly designed regional structural stormwater BMP. Routine maintenance of structural stormwater BMPs already required by the General Permit cannot be used to meet this requirement. |  |  |  |  |
| 20.13 | Off-site treatment projects must be completed no later than 24 months after the start of the original construction activity. If the permittee determines more time is needed to complete the treatment project, the permittee must provide the reason(s) and schedule(s) for completing the project in the annual report. |  |  |  |  |
| 20.14 | If the permittee receives payment from the owner of a construction activity for off-site treatment, the permittee must apply any such payment received to a public stormwater project, and all projects must comply with the requirements in items 20.11 through 20.13. |  |  |  |  |
| 20.15 | The permittee's regulatory mechanism(s) must include the establishment of legal mechanism(s) between the permittee and owners of structural stormwater BMPs not owned or operated by the permittee, that have been constructed to meet the requirements in Section 20. The legal mechanism(s) must include provisions that, at a minimum: |  |  |  |  |
|  | 1. allow the permittee to conduct inspections of structural stormwater BMPs not owned or operated by the permittee, perform necessary maintenance, and assess costs for those structural stormwater BMPs when the permittee determines the owner of that structural stormwater BMP has not ensured proper function; |  |  |  |  |
|  | 1. are designed to preserve the permittee's right to ensure maintenance responsibility, for structural stormwater BMPs not owned or operated by the permittee, when those responsibilities are legally transferred to another party; and |  |  |  |  |
|  | 1. are designed to protect/preserve structural stormwater BMPs. If structural stormwater BMPs change, causing decreased effectiveness, new, repaired, or improved structural stormwater BMPs must be implemented to provide equivalent treatment to the original BMP. |  |  |  |  |
| 20.16 | The permittee must maintain a written or mapped inventory of structural stormwater BMPs not owned or operated by the permittee that meet all of the following criteria: |  |  |  |  |
|  | 1. the structural stormwater BMP includes an executed legal mechanism(s) between the permittee and owners responsible for the long-term maintenance, as required in item 20.15; and |  |  |  |  |
|  | 1. the structural stormwater BMP was implemented on or after August 1, 2013. |  |  |  |  |
| 20.17 | The permittee must implement written procedures for site plan reviews conducted by the permittee prior to the start of construction activity, to ensure compliance with requirements of the permittee's regulatory mechanism(s). |  |  |  |  |
| 20.18 | The permittee must ensure that individuals receive training commensurate with their responsibilities as they relate to the permittee's Post-Construction Stormwater Management program. Individuals includes, but is not limited to, individuals responsible for conducting site plan reviews and/or enforcement. The permittee must ensure that previously trained individuals attend a refresher-training every three (3) calendar years following the initial training. |  |  |  |  |
| 20.19 | The permittee must maintain written enforcement response procedures (ERPs) to compel compliance with the permittee's regulatory mechanism(s) required in Section 20. At a minimum, the written ERPs must include: |  |  |  |  |
|  | 1. a description of enforcement tools available to the permittee and guidelines for the use of each tool; and |  |  |  |  |
|  | 1. name or position title of responsible person(s) for conducting enforcement. |  |  |  |  |
| 20.20 | For each site plan review conducted by the permittee, the permittee must document the following: |  |  |  |  |
|  | 1. supporting documentation used to determine compliance with Section 20 of the General Permit, including any calculations for the permanent stormwater treatment system; |  |  |  |  |
|  | 1. the water quality volume that will be treated through volume reduction practices (e.g., infiltration or other) compared to the total water quality volume required to be treated; |  |  |  |  |
|  | 1. documentation associated with off-site treatment projects authorized by the permittee, including rationale to support the location of permanent stormwater treatment projects in accordance with items 20.10 and 20.11; |  |  |  |  |
|  | 1. payments received and used in accordance with item 20.14; and |  |  |  |  |
|  | 1. all legal mechanisms drafted in accordance with item 20.15, including date(s) of the agreement(s) and name(s) of all responsible parties involved. |  |  |  |  |
| 20.21 | For each training in item 20.18, the permittee must document: |  |  |  |  |
|  | 1. general subject matter covered; |  |  |  |  |
|  | 1. names and departments of individuals in attendance; and |  |  |  |  |
|  | 1. date of each event. |  |  |  |  |
| 20.22 | The permittee must document any enforcement conducted pursuant to the ERPs in item 20.19, including verbal warnings. At a minimum, the permittee must document the following: |  |  |  |  |
| 1. name of the person responsible for violating the terms and conditions of the permittee's regulatory mechanism(s); |  |  |  |  |
| 1. date(s) and location(s) of the observed violation(s); |  |  |  |  |
| 1. description of the violation(s); |  |  |  |  |
| 1. corrective action(s) (including completion schedule) issued by the permittee; |  |  |  |  |
| 1. referrals to other regulatory organizations (if any); and |  |  |  |  |
| 1. date(s) violation(s) resolved. |  |  |  |  |
| 20.23 | The permittee must conduct an annual assessment of the Post-Construction Stormwater Management program to evaluate program compliance, the status of achieving the measurable requirements in Section 20, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., inventory, trainings, site plan reviews, inspections, enforcement, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. |  |  |  |  |

|  |
| --- |
| **Comments:** |
|  |
| **Recommended actions:** |
|  |
| **Required corrective actions:** |
|  |

MS4 program area – MCM 6: pollution prevention/good housekeeping for municipal operations (Section 21)

| **Item** | **C = Compliant N = Noncompliant NI = Not inspected NA = Not** **Applicable** | **C** | **N** | **NI** | **NA** |
| --- | --- | --- | --- | --- | --- |
| 21.3 | The permittee must maintain a written or mapped inventory of permittee owned/operated facilities that contribute pollutants to stormwater discharges. The permittee must implement BMPs that prevent or reduce pollutants in stormwater discharges from all inventoried facilities. Facilities to be inventoried may include, but is not limited to:   a. composting;  b. equipment storage and maintenance; c. hazardous waste disposal; d. hazardous waste handling and transfer;  e. landfills; f. solid waste handling and transfer; g. parks; h. pesticide storage;  i. public parking lots; j. public golf courses; k. public swimming pools; l. public works yards; m. recycling; n. salt storage;  o. snow storage; p. vehicle storage and maintenance (e.g., fueling and washing) yards; and q. materials storage yards. |  |  |  |  |
| 21.4 | The permittee must implement BMPs that prevent or reduce pollutants in stormwater discharges from the following municipal operations that may contribute pollutants to stormwater discharges, where applicable:  a. waste disposal and storage, including dumpsters; b. management of temporary and permanent stockpiles of materials such as street sweepings, snow, sand and sediment removal piles (e.g., effective sediment controls at the base of stockpiles on the downgradient perimeter); c. vehicle fueling, washing, and maintenance; d. routine street and parking lot sweeping; e. emergency response; f. cleaning of maintenance equipment, building exteriors, dumpsters, and the disposal of associated waste and wastewater; g. use, storage, and disposal of significant materials; h. landscaping, park, and lawn maintenance; i. road maintenance, including pothole repair, road shoulder maintenance, pavement marking, sealing, and repaving; j. right-of-way maintenance, including mowing; and k. application of herbicides, pesticides, and fertilizers. |  |  |  |  |
| 21.5 | The permittee must implement the following BMPs at permittee owned/operated salt storage areas: |  |  |  |  |
|  | 1. cover or store salt indoors; |  |  |  |  |
|  | 1. store salt on an impervious surface; and |  |  |  |  |
|  | 1. implement practices to reduce exposure when transferring material from salt storage areas (e.g., sweeping, diversions, and/or containment). |  |  |  |  |
| 21.6 | The permittee must implement a written snow and ice management policy for individuals that perform winter maintenance activities for the permittee. The policy must establish practices and procedures for snow and ice control operations (e.g., plowing or other snow removal practices, sand use, and application of deicing compounds). |  |  |  |  |
| 21.7 | Each calendar year, the permittee must ensure all individuals that perform winter maintenance activities for the permittee receive training that includes: |  |  |  |  |
|  | 1. the importance of protecting water quality; |  |  |  |  |
|  | 1. BMPs to minimize the use of deicers (e.g., proper calibration of equipment and benefits of pretreatment, pre-wetting, and anti-icing); and |  |  |  |  |
|  | 1. tools and resources to assist in winter maintenance (e.g., deicing application rate guidelines, calibration charts, Smart Salting Assessment Tool). |  |  |  |  |
| 21.8 | The permittee must maintain written procedures for the purpose of determining the TSS and TP treatment effectiveness of all permittee owned/operated ponds constructed and used for the collection and treatment of stormwater. |  |  |  |  |
| 21.9 | The permittee must inspect structural stormwater BMPs (excluding stormwater ponds, which are under a separate schedule below) each calendar year to determine structural integrity, proper function, and maintenance needs unless the permittee determines either of the following conditions apply:  a. complaints received or patterns of maintenance indicate a greater frequency is necessary; or  b. maintenance or sediment removal is not required after completion of the first two calendar year inspections; in which case the permittee may reduce the frequency of inspections to once every two (2) calendar years. |  |  |  |  |
| 21.10 | Prior to the expiration date of the General Permit, the permittee must conduct at least one inspection of all ponds and outfalls (excluding underground outfalls) in order to determine structural integrity, proper function, and maintenance needs. |  |  |  |  |
| 21.11 | Based on inspection findings, the permittee must determine if repair, replacement, or maintenance measures are necessary in order to ensure the structural integrity and proper function of structural stormwater BMPs and outfalls. The permittee must complete necessary maintenance as soon as possible. If the permittee determines necessary maintenance cannot be completed within one year of discovery, the permittee must document a schedule(s) for completing the maintenance. |  |  |  |  |
| 21.12 | The permittee must implement a stormwater management training program commensurate with individual's responsibilities as they relate to the permittee's SWPPP, including reporting and assessment activities. The permittee may use training materials from the United States Environmental Protection Agency (USEPA), state and regional agencies, or other organizations as appropriate to meet this requirement. The training program must: |  |  |  |  |
|  | 1. address the importance of protecting water quality; |  |  |  |  |
|  | 1. cover the requirements of the permit relevant to the responsibilities of the individual not already addressed in items 18.8, 18.9, 19.11, 20.18, and 21.7; and |  |  |  |  |
|  | 1. include a schedule that establishes initial training for individuals, including new and/or seasonal employees, and recurring training intervals to address changes in procedures, practices, techniques, or requirements. |  |  |  |  |
| 21.13 | The permittee must document the following information associated with the operations and maintenance program: |  |  |  |  |
|  | 1. date(s) and description of findings, including whether or not an illicit discharge is detected, for all inspections conducted in accordance with items 21.9 and 21.10; |  |  |  |  |
|  | 1. any adjustments to inspection frequency as authorized in item 21.9; |  |  |  |  |
|  | 1. date(s) and a description of maintenance conducted as a result of inspection findings, including whether or not an illicit discharge is detected; |  |  |  |  |
|  | 1. schedule(s) for maintenance of structural stormwater BMPs and outfalls as required in item 21.11; and |  |  |  |  |
|  | 1. stormwater management training events, including general subject matter covered, names and departments of individuals in attendance, and date of each event. |  |  |  |  |
| 21.14 | The permittee must document pond sediment excavation and removal activities, including: |  |  |  |  |
| 1. a unique ID number and geographic coordinates of each stormwater pond from which sediment is removed; |  |  |  |  |
| 1. the volume (e.g., cubic yards) of sediment removed from each stormwater pond; |  |  |  |  |
| 1. results from any testing of sediment from each removal activity; and |  |  |  |  |
| 1. location(s) of final disposal of sediment from each stormwater pond. |  |  |  |  |
| 21.15 | The permittee must conduct an annual assessment of the operations and maintenance program to evaluate program compliance, the status of achieving the measurable requirements in Section 21, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., inventory, trainings, inspections, maintenance activities, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. |  |  |  |  |

|  |
| --- |
| **Comments:** |
|  |
| **Recommended actions:** |
|  |
| **Required corrective actions:** |
|  |

***Note: The following sections can be deleted by staff if it does not pertain to the permittee’s stormwater program.***

MS4 program area – discharges to impaired waters with a U.S. Environmental Protection Agency (EPA)-approved Total Maximum Daily Load (TMDL) that includes an applicable Waste Load Allocation (WLA) (Section 22)

| **Item** | **C = Compliant N = Noncompliant NI = Not inspected NA = Not** **Applicable** | **C** | **N** | **NI** | **NA** |
| --- | --- | --- | --- | --- | --- |
| 22.2 | If the permittee has an applicable WLA not being met for oxygen demand, nitrate, TSS, or TP, the permittee must provide a summary of the permittee's progress toward achieving those applicable WLAs with the annual report. The summary must include the following information: |  |  |  |  |
|  | 1. a list of all BMPs applied towards achieving applicable WLAs for oxygen demand, nitrate, TSS, and TP; |  |  |  |  |
|  | 1. the implementation status of BMPs included in the compliance schedule at the time of final application submittal; and |  |  |  |  |
|  | 1. an updated estimate of cumulative TSS and TP load reductions. |  |  |  |  |
| 22.3 | If the permittee has an applicable WLA where a reduction in pollutant loading is required for bacteria, the permittee must maintain a written or mapped inventory of potential areas and sources of bacteria (e.g., dense populations of waterfowl or other bird, dog parks). |  |  |  |  |
| 22.4 | If the permittee has an applicable WLA where a reduction in pollutant loading is required for bacteria, the permittee must maintain a written plan to prioritize reduction activities to address the areas and sources identified in the inventory in item 22.3. The written plan must include BMPs the permittee will implement over the permit term, which may include, but is not limited to:  a. water quality monitoring to determine areas of high bacteria loading; b. installation of pet waste pick-up bags in parks and open spaces; c. elimination of over-spray irrigation that may occur at permittee owned areas; d. removal of organic matter via street sweeping; e. implementation of infiltration structural stormwater BMPs; or f. management of areas that attract dense populations of waterfowl (e.g., riparian plantings). |  |  |  |  |
| 22.5 | If the permittee has an applicable WLA where a reduction in pollutant loading is required for chloride, the permittee must document the amount of deicer applied each winter maintenance season to all permittee owned/operated surfaces. |  |  |  |  |
| 22.6 | If the permittee has an applicable WLA where a reduction in pollutant loading is required for chloride, each calendar year the permittee must conduct an assessment of the permittee's winter maintenance operations to reduce the amount of deicing salt applied to permittee owned/operated surfaces and determine current and future opportunities to improve BMPs. The permittee may use the Agency's Smart Salting Assessment Tool or other available resources and methods to complete this assessment. The permittee must document the assessment. The assessment may include, but is not limited to:  a. operational changes such as pre-wetting, pre-treating the salt stockpile, increasing plowing prior to deicing, monitoring of road surface temperature, etc.; b. implementation of new or modified equipment providing pre-wetting, or other capability for minimizing salt use; c. regular calibration of equipment; d. optimizing mechanical removal to reduce use of deicers; or e. designation of no salt and/or low salt zones. |  |  |  |  |
| 22.7 | If the permittee has an applicable WLA where a reduction in pollutant loading is required for temperature (i.e., City of Duluth, City of Hermantown, City of Rice Lake, City of Stillwater, MnDOT Outstate, St. Louis County, University of Minnesota - Duluth, and Lake Superior College), the permittee must maintain a written plan that identifies specific activities the permittee will implement to reduce thermal loading during the permit term. The written plan may include, but is not limited to:  a. implementation of infiltration BMPs such as bioinfiltration practices; b. disconnection and/or reduction of impervious surfaces; c. retrofitting existing structural stormwater BMPs; or d. improvement of riparian vegetation. |  |  |  |  |

|  |
| --- |
| **Comments:** |
|  |
| **Recommended actions:** |
|  |
| **Required corrective actions:** |
|  |

MS4 program area – Alum or Ferric Chloride Phosphorus Treatment Systems (Section 23)

| **Item** | **C = Compliant N = Noncompliant NI = Not inspected NA = Not** **Applicable** | **C** | **N** | **NI** | **NA** |
| --- | --- | --- | --- | --- | --- |
| 23.2 | If the permittee uses an alum or ferric chloride phosphorus treatment system, the permittee must comply with Section 23 requirements. |  |  |  |  |
| 23.3 | The permittee's alum or ferric chloride phosphorus treatment system must comply with the following: |  |  |  |  |
|  | 1. the permittee must use the treatment system for the treatment of phosphorus in stormwater. Non-stormwater discharges must not be treated by this system; |  |  |  |  |
|  | 1. the treatment system must be contained within the conveyances and structural stormwater BMPs of the MS4. The utilized conveyances and structural stormwater BMPs must not include any receiving waters; |  |  |  |  |
|  | 1. phosphorus treatment systems utilizing chemicals other than alum or ferric chloride must receive written approval from the Agency; and |  |  |  |  |
|  | 1. in-lake phosphorus treatment activities are not authorized under the General Permit. |  |  |  |  |
| 23.4 | The permittee's alum or ferric chloride phosphorus treatment system must meet the following design parameters: |  |  |  |  |
|  | 1. the treatment system must be constructed in a manner that diverts the stormwater flow to be treated from the main conveyance system; |  |  |  |  |
|  | 1. a high flow bypass must be part of the inlet design; and |  |  |  |  |
|  | 1. a flocculant 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. |  |  |  |  |
| 23.5 | 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. |  |  |  |  |
| 23.6 | Three (3) benchmark monitoring stations must be established. Table 1 in Appendix A must be used for the parameters, units of measure, and frequency of measurement for each station. |  |  |  |  |
| 23.7 | Samples must be collected as grab samples or flow-weighted 24-hour composite samples. |  |  |  |  |
| 23.8 | 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; |  |  |  |  |
|  | 1. detection limits for dissolved phosphorus, dissolved aluminum, and dissolved iron must be a minimum of 6 micrograms per liter, 10 micrograms per liter, and 20 micrograms per liter, respectively; and |  |  |  |  |
|  | 1. pH must be measured within 15 minutes of sample collection using calibrated and maintained equipment. |  |  |  |  |
| 23.9 | 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 discharged water is not within the range of 6.0 and 9.0; |  |  |  |  |
|  | 1. any indications of toxicity or measurements exceeding water quality standards which could endanger human health, public drinking water supplies, or the environment; or |  |  |  |  |
|  | 1. a spill or discharge or alteration resulting in water pollution as defined in Minn. Stat. 115.01, subd. 13, of alum or ferric chloride. |  |  |  |  |
|  | If item b is applicable, the permittee must also report the non-compliance to the Commissioner as required in item 26.11. |  |  |  |  |
| 23.10 | If the permittee discovers indications of toxicity or measurements exceeding water quality standards that the permittee determines does not endanger human health, public drinking water supplies, or the environment, the permittee must report the non-compliance to the Commissioner as required in item 26.12. |  |  |  |  |
| 23.11 | 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; |  |  |  |  |
|  | 1. chemical(s) used for treatment; |  |  |  |  |
|  | 1. gallons of water treated; |  |  |  |  |
|  | 1. gallons of alum or ferric chloride treatment used; |  |  |  |  |
|  | 1. calculated pounds of phosphorus removed; and |  |  |  |  |
|  | 1. any performance issues and the corrective action(s), including the date(s) when corrective action(s) were taken. |  |  |  |  |
| 23.12 | A record of the design parameters in items 23.13 through 23.15 must be kept on-site. |  |  |  |  |
| 23.13 | Site-specific jar testing conducted using typical and representative water samples in accordance with the most current approved version of ASTM D2035. |  |  |  |  |
| 23.14 | Baseline concentrations of the following parameters in the influent and receiving waters: |  |  |  |  |
|  | 1. aluminum or iron; and |  |  |  |  |
|  | 1. phosphorus. |  |  |  |  |
| 23.15 | The following system parameters and how each was determined: |  |  |  |  |
|  | 1. flocculant settling velocity; |  |  |  |  |
|  | 1. minimum required retention time; |  |  |  |  |
|  | 1. rate of diversion of stormwater into the system; |  |  |  |  |
|  | 1. the flow rate from the discharge of the outlet structure; and |  |  |  |  |
|  | 1. range of expected dosing rates. |  |  |  |  |
| 23.16 | The following site-specific procedures must be developed and a copy kept on-site: |  |  |  |  |
|  | 1. procedures for the installation, operation and maintenance of all pumps, generators, control systems, and other equipment; |  |  |  |  |
|  | 1. specific parameters for determining when the solids must be removed from the system and how the solids will be handled and disposed of; and |  |  |  |  |
|  | 1. procedures for cleaning up and/or containing a spill of each chemical stored on-site. |  |  |  |  |

|  |
| --- |
| **Comments:** |
|  |
| **Recommended actions:** |
|  |
| **Required corrective actions:** |
|  |

## Appendix A

Construction site stormwater runoff control regulatory mechanism(s) (Items 19.3 & 19.5)

|  | **C = Compliant N = Noncompliant NI = Not inspected NA = Not** **Applicable** | **C** | **N** | **NI** | **NA** |
| --- | --- | --- | --- | --- | --- |
|  | **Regulatory mechanism(s) that establishes requirements for erosion, sediment, and waste controls that is at leastas stringent as Construction Stormwater General Permit. The regulatory mechanism(s) includes the following:**  *Note: In the language below, “owner(s)/operator(s)” is a broadly defined as the person(s), firm(s), governmental agency(ies), or other entity(ies) responsible for compliance with the terms and conditions of the MS4 permittee’s regulatory mechanism(s). Typically, the “owner” possesses the title of land on which construction activities occur and the “operator” is the general contractor.* | | | | |
| **Erosion prevention practices** |  |  |  |  |
| Before work begins, owner(s)/operator(s) must delineate the location of areas not to be disturbed. |  |  |  |  |
| Owner(s)/operator(s) must minimize the need for disturbance of portions of the project with steep slopes. When steep slopes must be disturbed, owner(s)/operator(s) must use techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope draining and terracing). |  |  |  |  |
|  | Owner(s)/operator(s) must stabilize all exposed soil areas, including stockpiles. Stabilization must be initiated immediately to limit soil erosion when construction activity has permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding 14\* calendar days. Stabilization must be completed no later than 14\* calendar days after the construction activity has ceased. Stabilization is not required on constructed base components of roads, parking lots and similar surfaces. Stabilization is not required on temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) but owner(s)/operator(s) must provide sediment controls at the base of the stockpile. |  |  |  |  |
|  | **\*For any project that is within one mile (aerial radius measurement) of, and flows to “impaired waters”, “other special waters”, “prohibited waters”, and/or “restricted waters” as defined in the Construction Stormwater General Permit, owner(s)/operator(s) must immediately initiate stabilization of exposed soil areas, and complete the stabilization within seven (7) calendar days after the construction activity in that portion of the site temporarily or permanently ceases.** |  |  |  |  |
|  | For Public Waters that the Minnesota Department of Natural Resources (DNR) has promulgated “work in water restrictions” during specified fish spawning time frames, owner(s)/operator(s) must complete stabilization of all exposed soil areas within 200 feet of the water’s edge, and that drain to these waters, within 24 hours during the restriction period. |  |  |  |  |
| Owner(s)/operator(s) must stabilize the normal wetted perimeter of the last 200 linear feet of temporary or permanent drainage ditches or swales that drain water from the site within 24 hours after connecting to a surface water or property edge. Owner(s)/operator(s) must complete stabilization of the remaining portions of temporary or permanent ditches or swales within 14 calendar days after connecting to a surface water or property edge and construction in that portion of the ditch temporarily or permanently ceases. |  |  |  |  |
| Temporary or permanent ditches or swales that are being used as a sediment containment system during construction (with properly designed rock-ditch checks, bio rolls, silt dikes, etc.) do not need to be stabilized. Owner(s)/operator(s) must stabilize these areas within 24 hours after their use as a sediment containment system ceases. |  |  |  |  |
|  | Owner(s)/operator(s) must not use mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practices within any portion of the normal wetted perimeter of a temporary or permanent drainage ditch or swale section with a continuous slope of greater than two percent. |  |  |  |  |
|  | Owner(s)/operator(s) must provide temporary or permanent energy dissipation at all pipe outlets within 24 hours after connection to a surface water or permanent stormwater treatment system. |  |  |  |  |
|  | Owner(s)/operator(s) must not disturb more land (i.e., phasing) than can be effectively inspected and maintained. |  |  |  |  |
|  | **Sediment control practices** |  |  |  |  |
| Owner(s)/operator(s) must establish sediment control BMPs on all down gradient perimeters of the site and downgradient areas of the site that drain to any surface water, including curb and gutter systems. Owner(s)/operator(s) must locate sediment control practices upgradient of any buffer zones. Owner(s)/operator(s) must install sediment control practices before any upgradient land-disturbing activities begin and must keep the sediment control practices in place until they establish permanent cover. |  |  |  |  |
| If the downgradient sediment controls are overloaded, based on frequent failure or excessive maintenance requirements, owner(s)/operator(s) must install additional upgradient sediment control practices or redundant BMPs to eliminate the overloading and amend the site plans to identify these additional practices. |  |  |  |  |
| Temporary or permanent drainage ditches and sediment basins designed as part of a sediment containment system (e.g., ditches with rock-check dams) require sediment control practices only as appropriate for site conditions. |  |  |  |  |
| A floating silt curtain placed in the water is not a sediment control BMP to satisfy perimeter control requirements in this part except when working on a shoreline or below the waterline. Immediately after the short term construction activity (e.g. installation of rip rap along the shoreline) in that area is complete, owner(s)/operator(s) must install an upland perimeter control practice if exposed soils still drain to a surface water. |  |  |  |  |
|  | Owner(s)/operator(s) must re-install all sediment control practices adjusted or removed to accommodate short-term activities such as clearing or grubbing, or passage of vehicles, immediately after the short-term activity is completed. Owner(s)/operator(s) must re-install sediment control practices before the next precipitation event even if the short-term activity is not complete. |  |  |  |  |
|  | Owner(s)/operator(s) must protect all storm drain inlets using appropriate BMPs during construction until they establish permanent cover on all areas with potential for discharging to the inlet. |  |  |  |  |
| Owner(s)/operator(s) may remove inlet protection for a particular inlet if a specific safety concern (e.g., street flooding/freezing) is identified by owner(s)/operator(s) or the jurisdictional authority (e.g., city/county/township/ MnDOT engineer). Owner(s)/operator(s) must document the need for removal in the site plans. |  |  |  |  |
| Owner(s)/operator(s) must provide silt fence or other effective sediment controls at the base of stockpiles on the downgradient perimeter. |  |  |  |  |
| Owner(s)/operator(s) must locate stockpiles outside of natural buffers or surface waters, including stormwater conveyances such as curb and gutter systems unless there is a bypass in place for the stormwater. |  |  |  |  |
| Owner(s)/operator(s) must install a vehicle tracking BMP to minimize the track out of sediment from the construction site or onto paved roads within the site. |  |  |  |  |
| Owner(s)/operator(s) must use street sweeping if vehicle tracking BMPs are not adequate to prevent sediment tracking onto the street. |  |  |  |  |
| In any areas of the site where final vegetative stabilization will occur, owner(s)/operator(s) must restrict vehicle and equipment use to minimize soil compaction. |  |  |  |  |
|  | Owner(s)/operator(s) must preserve topsoil on the site, unless infeasible. |  |  |  |  |
|  | Owner(s)/operator(s) must direct discharges from BMPs to vegetated areas unless infeasible. |  |  |  |  |
|  | Owner(s)/operator(s) must preserve a 50\* foot natural buffer or, if a buffer is infeasible on the site, provide redundant (double) perimeter sediment controls when a surface water is located within 50\* feet of the project’s earth disturbances and stormwater flows to the surface water. Owner(s)/operator(s) must install  perimeter sediment controls at least 5 feet apart unless limited by lack of available space. Natural buffers are not required adjacent to road ditches, judicial ditches, county ditches, stormwater conveyance channels, storm drain inlets, and sediment basins. If preserving the buffer is infeasible, owner(s)/operator(s) must document the reasons in the site plans. Sheet piling is a redundant perimeter control if installed in a manner that retains all stormwater. |  |  |  |  |
|  | \***For any project that is within one mile (aerial radius measurement) of, and flows to “impaired waters”, “other special waters”, “prohibited waters”, and/or “restricted waters” as defined in the Construction Stormwater General Permit, owner(s)/operator(s) must include an undisturbed buffer zone of not less than 100 linear feet from a special water (not including tributaries) and must maintain this buffer zone at all times, both during construction and as a permanent feature post construction, except where a water crossing or other encroachment is necessary to complete the project. Owner(s)/operator(s) must fully document the circumstance and reasons the buffer encroachment is necessary in the site plans and include restoration activities. Owner(s)/operator(s) must minimize all potential water quality, scenic and other environmental impacts of these exceptions by the use of additional or redundant (double) BMPs and must document this in the site plans for the project.** |  |  |  |  |
|  | Owner(s)/operator(s) must use polymers, flocculants, or other sedimentation treatment chemicals in accordance with accepted engineering practices, dosing specifications and sediment removal design specifications provided by the manufacturer or supplier. Owner(s)/operator(s) must use conventional erosion and sediment controls prior to chemical addition and must direct treated stormwater to a sediment control system for filtration or settlement of the floc prior to discharge. |  |  |  |  |
|  | **Dewatering and basin draining** |  |  |  |  |
| Owner(s)/operator(s) must discharge turbid or sediment-laden waters related to dewatering or basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) to a temporary or permanent sediment basin on the project site unless infeasible. Owner(s)/operator(s) may dewater to surface waters if they visually check to ensure adequate treatment has been obtained and nuisance conditions (see Minn. R. 7050.0210, subp. 2) will not result from the discharge. If owner(s)/operator(s) cannot discharge the water to a sedimentation basin prior to entering a surface water, owner(s)/operator(s) must treat it with appropriate BMPs such that the discharge does not adversely affect the surface water or downstream properties. |  |  |  |  |
| If owner(s)/operator(s) must discharge water that contains oil or grease, owner(s)/operator(s) must use an oil-water separator or suitable filtration device (e.g. cartridge filters, absorbents pads) prior to discharge. |  |  |  |  |
| Owner(s)/operator(s) must discharge all water from dewatering or basin-draining activities in a manner that does not cause erosion or scour in the immediate vicinity of discharge points or inundation of wetlands in the immediate vicinity of discharge points that causes significant adverse impact to the wetland. |  |  |  |  |
|  | If owner(s)/operator(s) use filters with backwash water, they must haul the backwash water away for disposal, return the backwash water to the beginning of the treatment process, or incorporate the backwash water into the site in a manner that does not cause erosion. |  |  |  |  |
|  | **Inspection and maintenance** |  |  |  |  |
|  | Owner(s)/operator(s) must ensure that a trained person will inspect the entire construction site at least once every seven (7)\* days during active construction and within 24 hours after a rainfall event greater than one-half inch in 24 hours. |  |  |  |  |
|  | \***For any project that is within one mile (aerial radius measurement) of, and flows to “prohibited waters”, as defined in the Construction Stormwater General Permit, owner(s)/operator(s) must conduct routine site inspections once every three (3) days.** |  |  |  |  |
|  | Owner(s)/operator(s) must inspect and maintain all permanent stormwater treatment BMPs. |  |  |  |  |
| Owner(s)/operator(s) must inspect all erosion prevention and sediment control BMPs and Pollution Prevention Management Measures to ensure integrity and effectiveness. Owner(s)/operator(s) must repair, replace, or supplement all nonfunctional BMPs with functional BMPs by the end of the next business day after discovery unless another time frame is specified below. Owner(s)/operator(s) may take additional time if field conditions prevent access to the area. |  |  |  |  |
| During each inspection, owner(s)/operator(s) must inspect surface waters, including drainage ditches and conveyance systems but not curb and gutter systems, for evidence of erosion and sediment deposition. Owner(s)/operator(s) must remove all deltas and sediment deposited in surface waters, including drainage ways, catch basins, and other drainage systems and restabilize the areas where sediment removal results in exposed soil. Owner(s)/operator(s) must complete removal and stabilization within seven (7) calendar days of discovery unless precluded by legal, regulatory, or physical access constraints. Owner(s)/operator(s) must use all reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) calendar days of obtaining access. Owner(s)/operator(s) are responsible for contacting all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work in surface waters. |  |  |  |  |
| Owner(s)/operator(s) must inspect construction site vehicle exit locations, streets and curb and gutter systems within and adjacent to the project for sedimentation from erosion or tracked sediment from vehicles. Owner(s)/operator(s) must remove sediment from all paved surfaces within one (1) calendar day of discovery or, if applicable, within a shorter time to avoid a safety hazard to users of public streets. |  |  |  |  |
| Owner(s)/operator(s) must repair, replace, or supplement all perimeter control devices when they become nonfunctional or the sediment reaches one-half of the height of the device. |  |  |  |  |
| Owner(s)/operator(s) must drain temporary and permanent sedimentation basins and remove the sediment when the depth of sediment collected in the basin reaches one-half of the storage volume. |  |  |  |  |
| Owner(s)/operator(s) must ensure that at least one individual present on the site (or available to the project site in three (3) calendar days) is trained in the job duties of overseeing the implementation of, revising and/or amending the site plans and performing inspections for the project. |  |  |  |  |
| Owner(s)/operator(s) may adjust the inspection schedule as follows: |  |  |  |  |
| 1. inspections of areas with permanent cover can be reduced to once per month, even if construction activity continues on other portions of the site; or |  |  |  |  |
| 1. where construction sites have permanent cover on all exposed soil areas and no construction activity is occurring anywhere on the site, inspections can be reduced to once per month and, after 12 months, may be suspended completely until construction activity resumes. The MPCA may require inspections to resume if conditions warrant; or |  |  |  |  |
| 1. where construction activity has been suspended due to frozen ground conditions, inspections may be suspended. Inspections must resume within 24 hours of runoff occurring, or upon resuming construction, whichever comes first. |  |  |  |  |
| Owner(s)/operator(s) must record all inspections and maintenance activities within 24 hours of being conducted and these records must be retained with the site plans. These records must include: |  |  |  |  |
|  | 1. date and time of inspections; and |  |  |  |  |
|  | 1. name of person(s) conducting inspections; and |  |  |  |  |
| 1. accurate findings of inspections, including the specific location where corrective actions are needed; and |  |  |  |  |
|  | 1. corrective actions taken (including dates, times, and party completing maintenance activities); and |  |  |  |  |
| 1. date of all rainfall events greater than one-half inch in 24 hours, and the amount of rainfall for each event. Owner(s)/operator(s) must obtain rainfall amounts by either a properly maintained rain gauge installed onsite, a weather station that is within one (1) mile of owner(s)/operator(s)r location, or a weather reporting system that provides site specific rainfall data from radar summaries; and |  |  |  |  |
|  | 1. if owner(s)/operator(s) observe a discharge during the inspection, they must record and should photograph and describe the location of the discharge (i.e., color, odor, settled or suspended solids, oil sheen, and other obvious indicators of pollutants); and |  |  |  |  |
|  | 1. any amendments to the site plans proposed as a result of the inspection must be documented within seven (7) calendar days. |  |  |  |  |
|  | **Pollution prevention management measures** |  |  |  |  |
| Owner(s)/operator(s) must place building products and landscape materials under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. Owner(s)/operator(s) are not required to cover or protect products which are either not a source of contamination to stormwater or are designed to be exposed to stormwater. |  |  |  |  |
| Owner(s)/operator(s) must place pesticides, fertilizers and treatment chemicals under cover (e.g., plastic sheeting or temporary roofs) or protect them by similarly effective means designed to minimize contact with stormwater. |  |  |  |  |
| Owner(s)/operator(s) must store hazardous materials and toxic waste, (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) in sealed containers to prevent spills, leaks or other discharge. Storage and disposal of hazardous waste materials must be in compliance with Minn. R. ch. 7045 including secondary containment as applicable. |  |  |  |  |
| Owner(s)/operator(s) must properly store, collect, and dispose of solid waste in compliance with Minn. R. ch. 7035. |  |  |  |  |
| Owner(s)/operator(s) must position portable toilets so they are secure and will not tip or be knocked over. Owner(s)/operator(s) must dispose of sanitary waste in accordance with Minn. R. ch. 7041. |  |  |  |  |
|  | Owner(s)/operator(s) must take reasonable steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where chemicals or fuel will be loaded or unloaded including the use of drip pans or absorbents unless infeasible. Owner(s)/operator(s) must ensure adequate supplies are available at all times to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials. Owner(s)/operator(s) must report and clean up spills immediately as required by Minn. Stat. § 115.061, using dry clean up measures where possible. |  |  |  |  |
| Owner(s)/operator(s) must limit vehicle exterior washing and equipment to a defined area of the site. Owner(s)/operator(s) must contain runoff from the washing area in a sediment basin or other similarly effective controls and must dispose of waste from the washing activity properly. Owner(s)/operator(s) must properly use and store soaps, detergents, or solvents. |  |  |  |  |
|  | Owner(s)/operator(s) must provide effective containment for all liquid and solid wastes generated by washout operations (e.g., concrete, stucco, paint, form release oils, curing compounds and other construction materials) related to the construction activity. Owner(s)/operator(s) must prevent liquid and solid washout wastes from contacting the ground and must design the containment so it does not result in runoff from the washout operations or areas. Owner(s)/operator(s) must properly dispose of liquid and solid wastes in compliance with Minn. R. ch. 7035. Owner(s)/operator(s) must install a sign indicating the location of the washout facility. |  |  |  |  |
|  | **Temporary sediment basins** |  |  |  |  |
| Where ten (10)\* or more acres of disturbed soil drain to a common location, owner(s)/operator(s) must provide a temporary sediment basin to provide treatment of the runoff before it leaves the construction site or enters surface waters. Owner(s)/operator(s) may convert a temporary sediment basin to a permanent basin after construction is complete. The temporary basin is no longer required when permanent cover has reduced the acreage of disturbed soil to less than ten (10)\* acres draining to a common location. |  |  |  |  |
|  | **\*For any project that is within one mile (aerial radius measurement) of, and flows to “impaired waters”, “other special waters”, “prohibited waters”, and/or “restricted waters” as defined in the Construction Stormwater General Permit, owner(s)/operator(s) must provide a temporary sediment basin for common drainage locations that serve an area with five (5) or more acres disturbed at one time.** |  |  |  |  |
|  | The temporary basin must provide live storage for a calculated volume of runoff from a two (2)-year, 24-hour storm from each acre drained to the basin or 1,800 cubic feet of live storage per acre drained, whichever is greater. |  |  |  |  |
|  | Where owner(s)/operator(s) have not calculated the two (2)-year, 24-hour storm runoff amount, the temporary sediment basin must provide 3,600 cubic feet of live storage per acre of the basin’s drainage area. |  |  |  |  |
| Owner(s)/operator(s) must design basin outlets to prevent short-circuiting and the discharge of floating debris. |  |  |  |  |
| Owner(s)/operator(s) must design the outlet structure to withdraw water from the surface to minimize the discharge of pollutants. Owner(s)/operator(s) may temporarily suspend the use of a surface withdrawal mechanism during frozen conditions. The basin must include a stabilized emergency overflow to prevent failure of pond integrity. |  |  |  |  |
| Owner(s)/operator(s) must provide energy dissipation for the basin outlet within 24 hours after connection to a surface water. |  |  |  |  |
| Owner(s)/operator(s) must locate temporary basins outside of surface waters and any required buffer zones. |  |  |  |  |
| Owner(s)/operator(s) must construct temporary basins prior to disturbing (10) or more acres of soil draining to a common location. |  |  |  |  |
| Where a temporary sediment basin meeting the requirements of this part is infeasible, owner(s)/operator(s) must install effective sediment controls such as smaller sediment basins and/or sediment traps, silt fences, vegetative buffer strips or any appropriate combination of measures as dictated by individual site conditions. In determining whether installing a sediment basin is infeasible, owner(s)/operator(s) must consider public safety and may consider factors such as site soils, slope, and available area on-site. Owner(s)/operator(s) must document this determination of infeasibility in the site plans. |  |  |  |  |
|  | **Termination conditions** |  |  |  |  |
| Owner(s)/operator(s) must complete all construction activity and must install permanent cover over all areas. Vegetative cover must consist of a uniform perennial vegetation with a density of 70 percent of its expected final growth. Vegetation is not required where the function of a specific area dictates no vegetation, such as impervious surfaces or the base of a sand filter. |  |  |  |  |
| Owner(s)/operator(s) must clean the permanent stormwater treatment system of any accumulated sediment and must ensure the system meets all applicable requirements and is operating as designed. |  |  |  |  |
| Owner(s)/operator(s) must remove all sediment from conveyance systems. |  |  |  |  |
|  | Owner(s)/operator(s) must remove all temporary synthetic erosion prevention and sediment control BMPs. Owner(s)/operator(s) may leave BMPs designed to decompose on-site in place. |  |  |  |  |
| For residential construction only, permit coverage terminates on individual lots if the structure(s) are finished and temporary erosion prevention and downgradient perimeter control is complete and the residence sells to the homeowner. |  |  |  |  |
| For construction projects on agricultural land (e.g., pipelines across cropland), owner(s)/operator(s) must return the disturbed land to its preconstruction agricultural use. |  |  |  |  |