MINNESOTA POLLUTION CONTROL AGENCY

520 Lafayette Road North
St. Paul, MN 55155-4194

SWPPP checklist

Construction Stormwater Program

Stormwater Pollution Prevention Plan (SWPPP)

Doc Type: Stormwater Pollution Prevention Plan (SWPPP)

C000

Background: This checklist is used by Minnesota Pollution Control Agency (MPCA) staff for Stormwater Pollution Prevention Plan (SWPPP) reviews. It is provided as an additional resource intended for SWPPP designers for construction projects to assure all required elements of a SWPPP are included. Use of this checklist will help you to determine if your SWPPP is complete, though not all checklist items are applicable to all projects. This checklist can be used for all size projects; however, the guidance document "Stormwater Compliance Assistance Toolkit for Small Construction Operators," contains a SWPPP template designed specifically for small site projects. This guidance is available on the MPCA Construction Stormwater webpage at: https://www.pca.state.mn.us/water/construction-stormwater.

***Note** - This checklist is for your information and use is voluntary. The checklist does not need to be returned to the MPCA.*

Review information

Applicant: _____ Project name: _____

Application date: _____ Reviewer name: _____

Reason for review:

Yes	N/A		Notes
☐	☐	**Mandatory (over 50 acres and discharging to a special or impaired water)**	
☐	☐	**Random audit**	
☐	☐	**Enforcement case**	
		Case lead:	

SWPPP contains a combination of:

Yes	N/A		Notes
☐	☐	**Narrative**	
☐	☐	**Plan sheets**	
☐	☐	**Standard detail sheets (where appropriate)**	

SWPPP information

Yes	N/A	SWPPP narrative should contain the following:	Notes
☐	☐	A description of the nature of the construction activity	
☐	☐	The person knowledgeable and experienced in the application of erosion prevention and sediment control best management practices (BMPs) who will oversee the implementation of the SWPPP	
☐	☐	The person, organization, or entity (name or title) responsible for long-term operation and maintenance of the permanent stormwater treatment system	
☐	☐	Documentation for all trained individuals	
☐	☐	A description of installation timing for all erosion prevention and sediment control BMPs	
☐	☐	A description of the permanent cover methods for all exposed soil areas (may be in narrative or on plan sheets)	
☐	☐	Any stormwater mitigation measures proposed as part of environmental, endangered species, archaeological or other required local, state or federal reviews conducted for the project	
☐	☐	Identify discharges to any U.S. Environmental Protection Agency (EPA)-approved Total Maximum Daily Load (TMDL) for the pollutants/stressors described in item 23.7	

Yes	N/A	SWPPP narrative should contain the following (continued):	Notes
☐	☐	A description of the permanent stormwater treatment system	
☐	☐	A description of procedures to amend the SWPPP	
☐	☐	A description of methods used to minimize soil compaction and preserve topsoil	
☐	☐	In designing the stormwater controls, the SWPPP must account for:	
		Yes N/A	
		☐ ☐ The expected amount, frequency, intensity and duration of precipitation	
		☐ ☐ The nature of stormwater runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes and site drainage features	
		☐ ☐ The range of soil particles expected to be present	
		☐ ☐ The stormwater volume, velocity, and peak flowrates to minimize discharge of pollutants in stormwater and to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points	
☐	☐	A description of any specific chemicals and chemical treatment systems used for enhancing the sedimentation and how compliance with item 9.18 will be achieved	
☐	☐	Acres of impervious surfaces (pre- and post-construction)	
☐	☐	If permittees determine compliance with the following requirements is infeasible, document the determination:	
		Yes N/A	
		☐ ☐ Temporary sediment basins (must describe alternative BMPs used)	
		☐ ☐ If the permanent treatment system for linear projects cannot be constructed within the right-of-way (reasonable attempt to obtain the right-of-way must be made)	
		☐ ☐ Buffer zones	
		☐ ☐ The full volume reduction requirement	
☐	☐	Any required site assessments for groundwater or soil contamination	
☐	☐	Tabulated quantities of all erosion prevention and sediment control BMPs anticipated for the life of the project	

Yes	N/A	The plan sheets should contain the following:	Notes
☐	☐	A site map or maps including:	
		Yes N/A	
		☐ ☐ Existing and final grades	
		☐ ☐ Drainage area boundaries	
		☐ ☐ Direction of stormwater flow	
		☐ ☐ All discharge points where stormwater is leaving the site or entering a surface water	
		☐ ☐ Soil types	
		☐ ☐ Impervious surfaces	
		☐ ☐ Locations of potential pollutant generating activities (as identified in Section 12)	
		☐ ☐ Areas of steep slope (3:1 or greater)	
		☐ ☐ All surface waters, existing wetlands, and stormwater ponds/basins within one aerial mile that receive stormwater from the construction site, during or after construction *Note: If they do not fit on the plan sheets, use an arrow to note the direction and distance*	

Yes	N/A	The plan sheets should contain the following (continued):	Notes
		Yes N/A	
		☐ ☐ Construction activity areas that are adjacent to and drain to Public Waters for which the Minnesota Department of Natural Resources (DNR) has promulgated "work in water restrictions" during specified fish spawning time frames	
		☐ ☐ 50 foot buffer zones	
		☐ ☐ 100 foot permanent buffer zones	
☐	☐	Locations and types of all temporary and permanent erosion prevention and sediment control BMPs	
☐	☐	Locations of areas where construction will be phased to minimize duration of exposed soil areas	
Yes	N/A	**Standard plates or specifications:**	
☐	☐	Are standard plates or specifications included where appropriate?	

Construction activity requirements

Yes	N/A	**Erosion prevention measures:**	Notes
☐	☐	Exposed soils (including stockpiles) have erosion protection/cover initiated immediately and completed within 14 days (or 7 days per Section 23)	
☐	☐	For DNR Public Waters with "work in waters restrictions" during specified fish spawning time frames, stabilization must be completed for all exposed soil areas within 200 feet of the water's edge, and draining to the water, within 24 hours during the restriction period	
☐	☐	The wetted perimeter of the last 200 linear feet of ditches must be stabilized within 24 hours of connecting to a surface water or property line	
☐	☐	Temporary or permanent ditches or swales that are being used as a sediment containment system during construction must be stabilized within 24 hours after no longer being used as a sediment containment system	
☐	☐	Pipe outlets must have energy dissipation within 24 hours of connecting to a surface water or permanent stormwater treatment system	
☐	☐	Mulch, hydromulch, tackifier, polyacrylamide, or similar erosion prevention practices cannot be used within the normal wetted perimeter of drainage ditches or swale sections with a continuous slope greater than 2%	

Yes	N/A	**Sediment control measures:**	Notes
☐	☐	Sediment control practices are established on downgradient perimeters and upgradient of any buffer zones	
☐	☐	Sediment control practices are established at the base of stockpiles on the downgradient perimeter	
☐	☐	Stockpiles are located outside of natural buffers or surface waters, including stormwater conveyances (e.g., curb and gutter systems) unless there is a bypass	
☐	☐	Inlet protection BMPs included	
☐	☐	Vehicle tracking BMPs established where vehicles are exiting the site to minimize street tracking	

Yes	N/A	Sediment control measures (continued):	Notes
☐	☐	Plans to preserve topsoil (unless infeasible)	
☐	☐	Plans to minimize soil compaction	
☐	☐	Direct discharges from BMPs to vegetated areas, unless infeasible	
☐	☐	50-foot natural buffers are preserved **or** (if maintaining buffer is infeasible) redundant sediment controls are provided when a surface water is located within 50 feet of the project's earth disturbances and drains to the surface water	

Yes	N/A	Dewatering and basin draining:	Notes
☐	☐	If dewatering is required on the site, there must be a plan in place to prevent nuisance conditions, erosion, and inundation of wetlands	
☐	☐	If using filters with backwash water, backwash water must be hauled away for disposal, returned to the beginning of the treatment process, or incorporated into the site in a manner that does not erode into runoff	

Yes	N/A	Inspection requirements:	Notes
☐	☐	The SWPPP must identify the trained person (as identified in item 21.2.b) who will conduct inspections	
☐	☐	Inspections must be performed once every 7 days	
☐	☐	Inspections must be performed within 24 hours of a rain event greater than 0.5 inches in 24 hours	
☐	☐	Inspection and Maintenance records should include:	

Yes	N/A	
☐	☐	Date and time of inspection
☐	☐	Name of person(s) conducting inspections
☐	☐	Findings of inspections, including the specific location where corrective actions are needed
☐	☐	Corrective actions taken (including dates, times, and party completing maintenance activities)
☐	☐	Date and amount of rainfall events greater than 0.5 inch in 24 hours
☐	☐	Rainfall amounts must be obtained by a properly maintained rain gauge installed onsite, or by a weather station that is within one mile or by a weather reporting system
☐	☐	Requirements to observe any discharge that may be occurring during the inspection. Discharge should also be described and photographed

Yes	N/A	Maintenance requirements:	Notes
☐	☐	All nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs by the end of the next business day after discovery, or as soon as field conditions allow.	
☐	☐	Perimeter control devices must be repaired, replaced, or supplemented when nonfunctional or sediment reaches one-half the height of the device.	
☐	☐	Temporary and permanent sediment basins must be drained and sediment removed when the depth of sediment collected reaches one-half storage volume	

Yes	N/A	Maintenance requirements (continued):	Notes
☐	☐	All sediment deposits and deltas must be removed from surface waters (including drainage ways, catch basins, and other drainage systems) and the removal areas restabilized within seven days	
☐	☐	Sediment on paved surfaces (e.g., sediment tracked from vehicles) must be removed within one calendar day of discovery	
☐	☐	Permanent stormwater treatment BMPs must be inspected and maintained	

Yes	N/A	Pollution prevention management measures:	Notes
☐	☐	Proper storage, handling, and disposal of construction products, materials, and wastes is required	
☐	☐	SWPPP should address fueling and maintenance of equipment or vehicles and spill prevention and response	
☐	☐	Limit exterior vehicle and equipment washing to a defined area of the site	
☐	☐	The SWPPP should include a description of the containment for concrete and other washout waste	
☐	☐	Portable toilets must be positioned so that they are secure	

Yes	N/A	Permit termination conditions:	Notes
☐	☐	Permanent uniform perennial vegetative cover must be established at 70% density of its expected final growth	
☐	☐	The permanent stormwater treatment system is constructed, meets all requirements, and is operating as designed	
☐	☐	All temporary synthetic erosion prevention and sediment control BMPs must be removed	
☐	☐	Clean out sediment from conveyance systems and permanent stormwater treatment systems (return to design capacity)	
☐	☐	For residential sites, install temporary erosion protection and downgradient perimeter control and distribute the MPCA's Homeowner Fact Sheet	
☐	☐	Submit a Notice of Termination (NOT) to the MPCA	

Design requirements

Yes	N/A	Temporary sediment basins:	Notes
☐	☐	If yes:	

Yes	N/A	
☐	☐	Basins must provide live storage for runoff from a 2-year, 24-hour storm (minimum 1,800 ft^3/acre) or, with no calculative minimum, provide 3,600 ft^3/acre
☐	☐	Outlets must be designed to remove floating debris
☐	☐	Outlets must be designed to allow complete drawdown
☐	☐	Outlets must be designed to withdraw water from the surface
☐	☐	Outlets must have energy dissipation within 24 hours of connecting to a surface water

Yes N/A **Temporary sediment basins (continued):** Notes

If yes:

Yes N/A

- ☐ ☐ Basins must be designed to prevent short circuiting
- ☐ ☐ Basins must have a stabilized emergency overflow
- ☐ ☐ Basins must be situated outside of surface waters and any required buffer zones

Yes N/A **Permanent stormwater treatment system:** Notes

- ☐ ☐ Include calculations for the permanent stormwater treatment system (water quality volume of one inch times the net increase of impervious surfaces created by the project to be retained on site)
- ☐ ☐ Volume reduction practices must be considered first
- ☐ ☐ Is infiltration prohibited due to the practice being constructed in or receiving discharges from one of the following?

  Yes N/A

  - ☐ ☐ Areas where vehicle fueling and maintenance occur
  - ☐ ☐ Areas with less than three (3) feet of separation distance from the bottom of the infiltration system to the seasonally saturated soils or the top of bedrock
  - ☐ ☐ Areas where industrial facilities are not authorized to infiltrate industrial stormwater under a National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Industrial Stormwater Permit issued by the MPCA:
    - ☐ Automobile salvage yards
    - ☐ Scrap recycling and waste recycling facilities
    - ☐ Hazardous waste treatment, storage or disposal facilities
    - ☐ Air transportation facilities that conduct deicing activities
  - ☐ ☐ Areas where high levels of contaminants in soil or groundwater may be mobilized by the infiltrating stormwater
  - ☐ ☐ Areas of predominantly Hydrological Soil Group D (clay) soils
  - ☐ ☐ Areas within 1,000 feet upgradient, or 100 feet downgradient of active karst features
  - ☐ ☐ Areas within a Drinking Water Supply Management Area (DWSMA) as defined in Minn. R. 4720.5100, subp. 13, if the system will be located in:
    - ☐ An Emergency Response Area (ERA) within a DWSMA classified as having high or very high vulnerability
    - ☐ An ERA within a DWSMA classified as having moderate vulnerability unless a regulated MS4 Permittee has performed or approved a higher level of engineering review

Yes	N/A	Permanent stormwater treatment system (continued):	Notes
		☐ Outside of an ERA within a DWSMA classified as having high or very high vulnerability unless a regulated MS4 Permittee has performed or approved a higher level of engineering review	
☐	☐	Areas where soil infiltration rates are field measured at more than 8.3 inches per hour unless soils are amended to slow the infiltration rate below 8.3 inches per hour	
☐	☐	If infiltration is prohibited:	

Yes	N/A	
☐	☐	Other methods of volume reduction are considered
☐	☐	The water quality volume is treated by a wet sedimentation basin, filtration system, regional ponding or equivalent methods prior to the discharge of stormwater to surface waters.

☐	☐	If proximity to bedrock precludes the installation of any of the permanent stormwater management practices, some treatment has been provided:	

Yes	N/A	
☐	☐	Grassed swales
☐	☐	Smaller ponds
☐	☐	Grit chambers

Yes	N/A	Permanent treatment method selected:	Notes
☐	☐	Infiltration (e.g., infiltration basins, infiltration trenches, rain gardens, swales with check dams, natural depressions)	

Yes	N/A	
☐	☐	Include at least one soil boring, test pit or infiltrometer test in the location of the infiltration practice
☐	☐	If the infiltration rate has been field-measured, the rate has been divided by two for design purposes
☐	☐	Appropriate testing has been conducted to ensure a minimum of three feet of separation from the bottom of the infiltration practice to the seasonally saturated soils and/or bedrock
☐	☐	The system has been designed to maintain pre-existing hydrologic conditions of wetlands in the vicinity (e.g., do not breach a perched water table that is supporting a wetland)
☐	☐	The SWPPP includes requirements to avoid excavating the infiltration system within three feet of final grade before the drainage area is stabilized
☐	☐	If the infiltration system is excavated within three feet of final grade, rigorous erosion prevention and sediment control BMPs are used to keep all runoff and sediment out of the infiltration system

Yes	N/A	Permanent treatment method selected (continued):	Notes
☐	☐	Infiltration (continued)	

Yes	N/A	
☐	☐	A pretreatment device is planned
☐	☐	All stormwater routed to the practice can be discharged in 48 hours *Note: Any additional flows must bypass the system through a stabilized discharge point*
☐	☐	There is a way to visually verify the system is operating as designed
☐	☐	Adequate maintenance access is provided

			Notes
☐	☐	Filtration (e.g., sand filters, biofiltration areas, swales using underdrains and check dams, and underground sand filters)	

Yes	N/A	
☐	☐	The filtration system is designed to remove at least 80% of total suspended solids (TSS)
☐	☐	The SWPPP includes requirements to not install the filter media until the drainage area is fully stabilized
☐	☐	If the filter media is installed before the drainage area is fully stabilized, rigorous erosion prevention and sediment control BMPs are used to keep all runoff and sediment out of the filtration practice
☐	☐	A pretreatment device is planned
☐	☐	All stormwater routed to the practice can be discharged in 48 hours or less
☐	☐	There is a way to visually verify the system is operating as designed
☐	☐	Appropriate testing has been conducted to ensure a minimum of three feet of separation from the bottom of the filtration practice to the seasonally saturated soils and/or bedrock
☐	☐	If there is less than three feet of separation, the filter has been designed with an impermeable liner
☐	☐	Adequate maintenance access is provided

			Notes
☐	☐	Wet sedimentation basin	

Yes	N/A	
☐	☐	The basin must provide live storage of one inch (or the remainder of volume not reduced) of runoff from new impervious surfaces
☐	☐	The basin must provide a permanent volume of 1,800 feet^3 below the outlet pipe for each acre draining to the basin
☐	☐	The permanent pool depth is between 3 feet and 10 feet

☐ ☐ Wet sedimentation basin (continued)

Notes

- ☐ ☐ The basin is configured to minimize scour or resuspension of solids
- ☐ ☐ Outlets must be designed to discharge at less than 5.66 cubic feet per second (cfs) per acre of pond
- ☐ ☐ Outlets must be designed to prevent short circuiting
- ☐ ☐ Outlets must be designed to prevent the discharge of floatables
- ☐ ☐ A stabilized emergency overflow is provided
- ☐ ☐ Adequate maintenance access is provided
- ☐ ☐ The basin is located outside of surface waters and any buffer zones required in item 23.11
- ☐ ☐ If the basin is in active karst terrain, the basin must be designed with an impermeable liner

☐ ☐ Regional wet sedimentation basin

Notes

Yes	N/A	
☐	☐	Provide written authorization from the owner of the regional basin
☐	☐	Ensure that there will be no significant degradation of waterways between the project and the regional basin
☐	☐	The regional basin design conforms to the permit requirements for a wet sedimentation basin

Yes	N/A	**Record retention requirements:**
☐	☐	The SWPPP (including all changes to it) must be kept at the site during construction by the permittee who has operational control of that portion of the site

Notes

Yes	N/A	**Additional requirements for discharges to Special (Prohibited, Restricted, Other) and Impaired Waters:**
☐	☐	Does this site drain to a discharge point on the project that is within one aerial mile of a Special or Impaired Water?

Which type of special or impaired water?	BMP category	Notes
Prohibited waters		
☐ Wilderness areas	23.9, 23.10, 23.11, 23.13, 23.14	
☐ Part of Lake Superior	23.9, 23.10, 23.11, 23.13, 23.14	
☐ Scientific and natural areas	23.9, 23.10, 23.11, 23.13, 23.14	
Restricted waters		
☐ Lake Superior (apart from Prohibited)	23.9, 23.10, 23.11	
☐ Scenic and recreational river segments	23.9, 23.10, 23.11	
☐ Lake Trout lakes	23.9, 23.10, 23.11	
☐ Calcareous fens	23.9, 23.10, 23.11	
Other special waters		
☐ Trout lakes	23.9, 23.10, 23.11	
☐ Trout streams	23.9, 23.10, 23.11, 23.12	
Impaired water		
☐ Impaired for phosphorus, turbidity, TSS, dissolved oxygen or aquatic biota	23.9, 23.10	

BMP category	Requirement	Notes
☐ 23.9	Stabilization initiated immediately and completed within seven days	
☐ 23.10	Temporary sediment basin provided for areas of five acres or more that drain to a common location	
☐ 23.11	Include and maintain at all times an undisturbed buffer zone of not less than 100 linear feet from a special water	
☐ 23.12	Temperature controls	
☐ 23.13	Conduct routine site inspections once every three days when draining to Prohibited Waters	
☐ 23.14	If discharges to prohibited waters cannot provide volume reduction equal to one inch times the net increase of impervious surfaces, permittees must develop a permanent stormwater treatment system design that will result in no net increase of TSS or phosphorus to the prohibited water	

Yes	N/A	Requirements for discharges to wetlands:	Notes
☐	☐	Does this site have a discharge with the potential for adverse impacts to wetlands?	

If yes:

Yes	N/A	
☐	☐	Has the wetland mitigation sequence (avoid, minimize, mitigate) been followed/satisfied? Permittee must demonstrate this through one of the following:
☐	☐	The potential adverse impacts are addressed by permits/approvals from an official statewide program (e.g., U.S. Army Corps of Engineers, Minnesota DNR, Wetland Conservation Act)
☐	☐	If there are impacts not addressed by the permits or other determinations, compliance with 7050.0186 must be documented to the MPCA and approved