



Storm Water Pollution Prevention Program

Normandale Community College

Jon.Hanson@normandale.edu

Website: Normandale.edu

952-358-8900

9700 France Ave S

Bloomington, MN 55431



Purpose

The purpose of the SWPPP program is to develop a strategy to comply with Federal and State regulations put in place to minimize sediments and other pollutants from entering the wetland surrounding the College. Of particular interest to Normandale is our proximity to Nine Mile Creek on the North side of the campus and its designation as impaired waters for Chloride as well as biota. This proximity to Nine Mile Creek sets Normandale apart from other College's within the system as our reporting requirements are more stringent.

Background

The Minnesota Pollution Control Agency issues general permits with the National Pollution Discharge System (NPDES) to protect Minnesota wetlands, streams, rivers and lakes. The Federal Clean Water Act and Minnesota Administrative Rule Chapter 7090, Storm Water Regulatory Program govern the MS4 general rule process. MS4 permits are required of Minnesota State Colleges that:

1. Are located in an urbanized area based off of the area's census population.
2. Have over 1000 individuals in daily attendance
3. Have been designated by the MPCA as being required to have a permit.

Components of SWPPP Programs

All SWPPP programs are formatted to include the following categories in this particular order:

1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharges
4. Construction run-off
5. Post Construction run-off
6. Pollution Prevention and Housekeeping

1. Pollution Prevention Team

Primary Contact

Jon Hanson- Environmental Health and Safety Administrator

952-358-8942

Jon.hanson@normandale.edu

Role

- Creation and management of Storm Water Pollution Prevention Plan
- Conducts monthly assessments
- Reviews the plan for updates
- Payment of annual fees
- Submission of annual report

Authorizing Contact

1. Patrick Buhl- Associate Vice President of Operations and Safety
2. 952-358-8985
3. patrick.buhl@normandale.edu

Role

1. Authorized Administrator for changes to the SWWWP Plan
2. Oversees campus facilities management

Emergency Contacts

Thomas McCluney-Assistant Facilities Manager

952-358-8107

thomas.mccluney@normandale.edu

Erik Bentley-Public Safety Director

952-358-8274

eric.bentley@normandale.edu

2. Updates to the SWPPP Plan

The SWPPP plan will be updated annually for the following:

- Staffing Changes
- Changes a management method was determined to not be effective or a new one needed to be added.
- New or different materials have come in contact with storm water.
- Any changes in impaired water status.
- Change in sampling locations.

3. Facilities Description

Normandale is a Community College, located in Bloomington, Minnesota on 97 acres at 9700 France Ave. So. Normandale serves approximately 9500 students with about 675 faculty and staff members. Normandale is part of the Minnesota State Colleges and Universities system.

4. Site Map

Mapping showing the full Normandale Storm Water system are located on the Intranet under Environmental Health and Safety.

5. Minimum Control Measures

This section addresses education, controls and best management practices (BMP's) at Normandale to bring awareness to the college's efforts and processes to minimize storm water pollutants in our surrounding wetlands as well as the Nine Mile Creek Watershed District. In general t Normandale as the resource for storm water information. That is typically found in information put out by the City of Bloomington or the Minnesota Pollution Control Agency. At Normandale, the education piece can be found imbedded into course content. Other sources would include informational signing posted near our wetlands.

Definitions

Illicit Discharge-Any discharge into a storm water system no composed entirely of storm water

Impaired Waters-Those waters which fail to meet one or more water quality standards.

Minimum Control Measures (MCMs)- the 6 different components of the SWPPP plan.

National Pollutant Discharge Elimination Permit System- the terms and conditions that must be met when a facility discharges a specified amount of pollutant into surface or groundwater of the state.

Storm Water Pollution Prevention Program (SWPPP)- a site specific, written document signed by an executive (Associate Vice President of Operations and Safety) that identifies all of the activities and conditions at a site that could cause water pollution and that details the steps a facility will take to prevent the discharge of pollutants into the surrounding wetlands and watersheds. The intention of this plan is to help the EPA preserve and improve water quality.

Total Maximum Daily Load (TMDL)-the calculation of the maximum amount of a pollutant so that a body of water can still receive and still meet water quality standards.

Total Maximum Daily Load (TMDL)- is the calculation of the maximum of a pollutant allowed to enter the water so that the waterbody will meet and continue to meet water quality standards for that pollutant.

Total Suspended Solids (TSS)-concentrations in runoff that exceed concentration from other land uses.

Total Phosphorous (TP)-The measurement of all forms of phosphorus dissolved or particulate, that are found in a sample.

MCM 1 Public Education and Outreach

[Public education outreach materials, public education implementation plan, examples of how to document outreach materials.](#)

The limitation of being at a College is that the general public does not seek Normandale as a source of storm water information. The topic is imbedded with course teachings as an element of.

Courses

Environmental Biology

BIOL 1110

A general education course without the lab that explores the principles of environmental biology and the ways in which humans depend on and influence the natural world. Topics include the scientific method, basic ecological principles, population growth, natural resources, energy, conservation, pollution and their relationships to Minnesota and global environmental concerns.

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Climate Change: Science, Human Impacts and Adaptations

GEOG 1130

This course investigates the evidence from past and present climate change and what this implies for the future. At the end of this course, students will understand key principles of climate science, as well as identify and address human impacts and misconceptions. Students should be able to contribute meaningfully to conversations about climate change and people's responsibility for ensuring a global future.

Environmental Chemistry

CHEM 1010

Chemical concepts are covered and applied to understanding and analyzing current environmental issues. Topics include air and water pollution, nuclear power, energy usage, and recycling.

Geography-Resources, Society and Environment

GEOG 1104

Human-environmental interactions: Physical, social political processes, and perspectives related to global natural resource use, and issues of sustainability and global change.

Environmental Geology

GEOL 1110

The relationship between people and the natural environment (particularly the geological components of that environment) and includes three general topics: resource distribution (mineral and energy resources), utilization, natural hazards (volcanoes, earthquakes, floods) and their effects on human activity, human impacts on the natural environment (waste disposal).

Backpacking and Wilderness Preservation

EXSC 1153

Hiking equipment and clothing, minimum impact techniques, fires, water treatment, food preparation, area and route selection, map use, injury prevention and treatment. Strong emphasis on ecology, wildlife and environmental concerns, and preservation.

Environmental Ethics

PHIL 1140

Do animals have rights, do we have a moral obligation to preserve endangered species? What is sustainable development and do we have an ethical obligation to promote it. Do people including future generations, have a right to environmental protection? What is environmental racism, do we have a duty to preserve biodiversity? Does nature have value, and if so, what kind of value? These are just a few of the questions addressed in environmental ethics. Environmental ethics is the study of the moral relationship between humans and nature. In this course we will examine various efforts to understand the nature and extent of our duties to the non-human world.

Seminars

Annual environmentally related seminar. These seminars are intended to draw attention to a variety of environmental concerns including storm water.

MCM 2 Public Participation and Outreach

MCM 2 Public Participation and Outreach on our campus is intended to do the following:

1. To provide at least one opportunity annually, for the students, staff and faculty to have input into our storm water management planning.
2. To provide access to view the SWPPP document
3. Consider the input of our faculty, staff and students

Annual Meeting

Normandale's annual required public storm water meetings are hosted by the Environmental Sustainability Committee and are open to all students, faculty and staff.

- Posted on the Campus intranet and the Marketing Communication newsletter to students and staff 2 weeks prior to the meeting.
- The Environmental Health and Safety Administrator is responsible for the posting.
- Meetings are held during Fall semester annually at either the November or December meeting.
- Input from students and staff will be recorded in the meeting minutes.

Public Outreach

Information regarding stormwater protection containing the following information are included

- What Normandale is doing to protect storm water.
- What students, faculty and staff can do at home.

Locations of informational signs:

- Rain garden- west side of the Fine arts building
- Storm water retention pond- between Lot 5&6
- Identified wetland buffer zones along the perimeters of campus wetlands

MCM 3 Illicit Discharge Detection and Elimination

The Illicit discharge component of our SWPPP plan is intended to have a plan in place that detects and eliminates illicit discharges within our stormwater system.

Stormwater mapping

An updated stormwater map will be maintained on the intranet under category "Environmental Health and Safety", category-stormwater. This includes:

- All pipes 12" or greater
- Flow direction
- Unique identifier and geographic coordinates
- Receiving waters

Regulatory Information

Enforcement of the Illicit discharge program will be accomplished by the following:

- The Associate Vice President of Operations and Safety, Assistant Facilities Manager, Environmental Health and Safety and Grounds staff have the right to immediate stop any situations that they have observed compromising Normandale's storm water system. Grounds staff will immediately report their findings to the Environmental Health and Safety Administrator or a member of the Facilities Management team.
- If the situation includes contractor or vendor, a representative of those companies will immediately be contacted for remediation.
- The Environmental Health and Safety Administrator, Associate Vice President of Operations and Safety, or Assistant Facilities Manager will be the contact to the Minnesota Duty Officer if it has been determined to be necessary.

Inspections

The Environmental Health and Safety Administrator is responsible to ensure weekly inspections are being made. Grounds staff may be part of the inspection program.

Training

Note training under Best Management Practices (Section 6)

Priority Areas Likely to have illicit discharges

The following areas have been identified as areas that should be on our weekly schedule:

1. Location 1- Main sewer going underneath of France Avenue form Lot 1
2. Location 2-Rain garden NW corner of the Fine Arts building
3. Location 3-Retention pond (Former Labyrinth)
4. Location 4-Retention pond, South side of Lot 5
5. Location 5-Inlet to retention pond Lot 6
6. Location 6-Shipping and Receiving
7. Location 7-Rain garden Lot 1

An inspection log is maintained in the Environmental Health and Safety Administrators Office, B1608

Procedures for investigating, Locating and eliminating illicit discharges

1. Inspection checkoff list for evidence including visual and odors
2. Check to see if the current vegetation matches the design
3. Check to see if the vegetation appears healthy
4. Look for obstructions in the stormwater structures
5. Check for erosion

Spill Response Procedures

Spill response procedures are available on the intranet as part of Environmental Health and Safety and through the Public Safety office.

intranet.normandale.edu/EHSM/_layouts/15/WopiFrame.aspx?sourcedoc={FA20BF0C-6A49-4662-8532-1EACC6F9AB51}&file=Hazardous%20Materials%20Spill%20Response%20Plan.docx&action=default

Enforcement Response Procedures

Enforcement of the emergency response procedures is the responsibility of Facilities Management. In any instance the Associate Vice president of Operations and Safety will be notified. The Environmental Health and Safety Administrator will assist with the investigation.

Minnstate.edu/board/procedures/5-24p2g2.pdf

1. Name of individuals or entities responsible for violating the terms and conditions of the institution's regulatory mechanisms under paragraph a.
2. Date(s) and location(s) of the observed violation(s).
3. Description of violations, including reference to the relevant regulatory mechanism
4. Corrective action(s), including a completion schedule, issued by the College
5. Date(s) and type(s) of enforcement used to compel compliance (e.g., written notice, citation, stop work order, etc.
6. Referrals to other regulatory organizations (City of Bloomington, Nine Mile Creek Watershed District).
7. Date(s) violation(s) resolved.

MCM 4 Construction Site Runoff and Control

MSM 4 requires that Normandale have in place a construction control program to reduce the impact of land disturbing activities to storm water. The components include the following:

A site plan review procedure

Normandale, as part of the Minnesota State Colleges and Universities system, must require the general contractor and other parties responsible for the plan must submit site plans for review and approval by the College and system office program manager. The site plans must incorporate board procedure Minnstate.edu/board/procedures/5-24p2g2.pdf:

1. BMP's to minimize erosion
2. BMP's to minimize the discharge of sediment and other pollutants
3. BMP's for dewatering activities
4. Site inspections and records of rainfall events
5. BMP maintenance
6. Management of solid and hazardous wastes
7. Final stabilization upon completion of construction activity including the use of vegetative cover on all exposed soils.
8. Criteria for the use of temporary basins

Procedures for reports of non-compliance

Enforcement of the emergency response procedures is the responsibility of Facilities Management. In any instance the Associate Vice president of Operations and Safety will be notified. The Environmental Health and Safety Administrator will assist with the investigation.

Minnstate.edu/board/procedures/5-24p2g2.pdf

9. Name of individuals or entities responsible for violating the terms and conditions of the institution's regulatory mechanisms under paragraph a.
10. Date(s) and location(s) of the observed violation(s).
11. Description of violations, including reference to the relevant regulatory mechanism

12. Corrective action(s), including a completion schedule, issued by the College
13. Date(s) and type(s) of enforcement used to compel compliance (e.g., written notice, citation, stop work order, etc.
14. Referrals to other regulatory organizations (City of Bloomington, Nine Mile Creek Watershed District).
15. Date(s) violation(s) resolved.

1. [Inspection procedures](https://stormwater.pca.state.mn.us/index.php?title=Construction_site_inspection)-inspections should at minimum meet or exceed the MPCA Site Inspection Checklist
2. https://stormwater.pca.state.mn.us/index.php?title=Construction_site_inspection
2. [Enforcement response procedures](https://stormwater.pca.state.mn.us/index.php?title=Construction_site_inspection)
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5. Referrals to other regulatory organizations (City of Bloomington, Nine Mile Creek Watershed District).
6. Date(s) violation(s) resolved.

4. Documentation

Minnesota State Colleges and Universities Board Policy (required)
Minnstate.edu/board/procedures/5-24p2g2.pdf

Construction activity stormwater compliance documentation shall include:

1. For each site plan review: Project name, location, total acreage to be disturbed, owner and operator of the proposed construction activity and any storm-related comments and support documents used by the college to determine project approval or denial.
2. For each site inspection: Inspection or written means used to document site inspections.

MCM 5 Post-Construction Runoff Control

[MCM 5 requires that Normandale have and enforce a post construction that prevents or reduces stormwater pollution in new or re-development projects.](#)

- i. Regulatory mechanism
- ii. Requirement of use of green infrastructure
- iii. Regulatory mechanism that there will be no net increase in storm water volume
- iv. Mitigation provisions ff TSS and TP cannot be managed on site
- v. Long term maintenance agreements for structural BMP's
- vi. Site Plan Review
- vii. Documentation

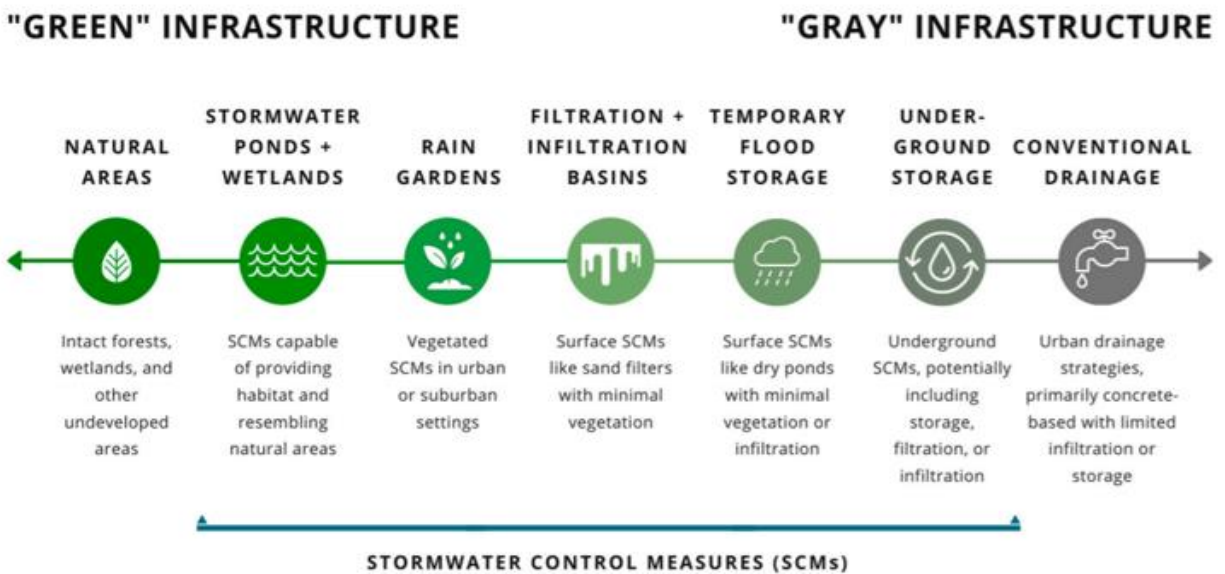
At Normandale this refers to recently completed projects effective from the time the project has been turned over to the College to the time that contract required warranty periods have been met. At this time these spaces will be covered under MCM 6.

Regulatory Mechanism

The regulatory mechanism is covered under the construction documents of the project. It requires the contractor to maintain, make all necessary repairs and use post construction best management practices (BMP's) through the end of the time period as designated in the project scope. The regulatory mechanism impacts the retainage account.

Green Infrastructure

Minnesota Storm Water Manual



At Normandale this specifically addresses the following:

1. Wetland protection
2. Retention ponds
3. Rain Garden establishment
4. Infiltration basins (including storm water interceptors)
5. Underground infiltration systems (Science, Lot 4, Lot 5)

Regulatory

The withholding of payment through the project retainage account will be applied for construction projects not meeting this standard. This applies also to any corrections needed for any corrections to storm water volume.

Mitigations

It is expected that all mitigations have the approval of the MPCA and Nine Mile Creek Watershed District prior to the start of any project. All mitigation for Total Suspended Solids (TSS) and Total Phosphorous (TP) will need to be treated on site unless otherwise specified in the construction contract documents.

Long Term Structural Maintenance Agreements

The College Facilities Management department is responsible for setting up maintenance contracts beyond the scope of the initial construction contract.

Site Plan Review

A site plan review is to be held prior to the preconstruction meeting and at the completion of the project.

Documentation

Documentation will be maintained by the Construction Superintendent in conjunction with the College's Owners Representative.

MCM 6 Pollution Prevention/Good Housekeeping

MCM 6 requires that Normandale have in place an operations and maintenance program to prevent or reduce pollutant discharges.

MCM 6.1 Facility Inventory

The facility inventory is maintained by the Environmental Health and Safety Administrator on the Normandale Intranet Share pointe site. The inventory includes the following areas that may impact stormwater:

1. Lot 6 snow removal equipment
2. Lot 6 salt storage stock piles
3. Receiving Hazardous material delivery
4. Lot 4 Lift Station
5. Lot 4 Grease interceptor
6. Lot 7 Food waste oil to be recycled
7. Lot 7 Fertilizer and pesticide storage area
8. Lot 7 Dumpster and compactor area
9. Lot 7 Fuel tanks

MCM 6.2 Best Management Practices

- 6.2.1 Daily Cleaning-the parking lots and the parking ramp standard of care requires that all litter is removed from the lots each morning on Monday-Friday and on Friday afternoons.
- 6.2.2 Mowing-mower clippings are reduced by a perimeter mowing first, blowing all clippings onto the turf. Remaining clippings discharged onto the sidewalks will be blown off by backpack blowers.
- 6.2.3 Parking Lot Sweeping- parking lots are swept 2x per year. The spring sweeping will be performed by a licensed contractor who will be responsible to properly dispose of salt and other winter contaminants. The fall sweeping will be performed by Facilities Management grounds staff. These materials will be disposed of with Normandale's construction debris.
- 6.2.4 Parking Ramp Sweeping- all sections of the ramp are to be swept a minimum of 1x per week March-November and during warm extended warm periods during the winter months.
- 6.2.5 Parking Ramp Washdown-a parking ramp wash down by a contractor who has the ability to pretreat oil spots, vacuuming up cleaning chemicals and debris. The ramp will be washed down to the lowest level and the salt contaminated water collected. The sump pits will be washed down and contaminated water collected.
- 6.2.6 Snow and ice control- parking lots will be treated with brine as the preferred method when temperatures are conducive. With colder temperature parking lots will be treated with ClearLane, a rock salt which is prewet and treated with liquid magnesium chloride. The minimal amount of salt is applied to achieve the desired results.
- 6.2.7 Salt storage- stored salt will be covered at all times with a tarp by the contractor or College staff if applicable.

- 6.2.8 Rain Garden- The rain garden located in Lot 1 is maintained every 3 weeks through the growing season, weeding and raking small rock back into place.
- 6.2.9 Fertilizing/Pesticide Application Processes-Fertilizers and pesticides will not be applied in any buffer zones by College staff. All applications to wetlands, settling ponds etc. will be performed by a licensed contractor specialized in applications to wetlands.
- 6.2.10 Rinsing out of spray equipment will be isolated to applications to landscaped spaces which match the labeled requirements.
- 6.2.11 Establish and follow thru on storms water structures including interceptors every 2 years.

MCM 6.3 BMP's to Protect Surface Water Intakes

- 1. Designated and signed snow dump areas approved by the Nine Mile Creek Watershed District
- 2. Buffer zones maintained around all wetlands with the exception of the Japanese Garden (approve variant)

MCM 6.4 Storm Water Pond Assessments

- A baseline assessment will be completed during FY22 with follow up assessments done every 2-3 years.

MCM 6.5 Operation Inspections

Annual storm water inspections will be performed during the summer using the following MinnState General Inspection list.

MCM 6.6 Maintenance of Structural BMP's, Outfalls and Ponds

MCM 6.7 Employee Training

Grounds staff will complete the MPCA Smart Salting and Turf Training every 3 years.

MCM 6.8 Documentation

The Storm Water Inspection Log -will be maintained by the Environmental Health and Safety Officer. This log will report on any findings.

Training records-Will be maintained by the Environmental Health and Safety Administrator

Prepared by:

Jon Hanson-Environmental Health and Safety Administrator

Jon.hanson@normandale.edu Hansonjm(\\Home2\Home)(H:)

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Reviewed by:

Ken Auer- Environmental Health and Safety Specialist

Kenneth.Auer@minnstate.edu

4/5/2021

Pat Buhl- Associate Vice President of Operations and Safety

Patrick.buhl@normandale.edu

4/6/2021

TMDL Calculations

Prepared by Kenny Horns- HGA Vice President and Civil Engineer Supervisor

KHorns@hga.com