

### Article III. Post-Construction Stormwater Management

**Sec. 10-50. Foreword.**

**Sec. 10-51. Authority.**

**Sec. 10-52. Findings of Fact.**

**Sec. 10-53. Purpose and Intent.**

**Sec. 10-54. Applicability and Jurisdiction.**

**Sec. 10-55. Definitions.**

**Sec. 10-56. Technical Standards.**

**Sec. 10-57. Performance Standards.**

**Sec. 10-58. Permitting Requirements, Procedures and Fees.**

**Sec. 10-59. Stormwater Management Plan.**

**Sec. 10-60. Maintenance Agreement.**

**Sec. 10-61. Financial Guarantee.**

**Sec. 10-62. Fee Schedule.**

**Sec. 10-63. Enforcement.**

**Sec. 10-64. Appeals.**

**Sec. 10-65. Severability.**

#### **Sec. 10-50. Foreword.**

The intent of this ordinance is to reduce the amount of post-construction stormwater and associated pollutants reaching waters of the state. Use of this ordinance by municipalities will foster the consistent statewide application of post-construction performance standards for new development and redevelopment contained in subchapters III and IV of chapter NR 151, Wis. Adm. Code.

#### **Sec. 10-51. Authority.**

This ordinance is adopted by Calumet County under the authority granted by s. 59.693, Wis. Stats. This ordinance supersedes all provisions of an ordinance previously enacted under s. 59.69, Wis. Stats., that relate to stormwater management regulations. Except as otherwise specified in s. 59.693, Wis. Stats., s. 59.69, Wis. Stats., applies to this ordinance and to any amendments to this ordinance.

The provisions of this ordinance are deemed not to limit any other lawful regulatory powers of the same governing body.

Calumet County hereby designates the Calumet County Land & Water Conservation Department to administer and enforce the provisions of this ordinance.

The requirements of this ordinance do not pre-empt more stringent stormwater management requirements that may be imposed by any of the following:

- (a) Wisconsin Department of Natural Resources administrative rules, permits or approvals including those authorized under ss. 281.16 and 283.33, Wis. Stats.
- (b) Targeted performance standards promulgated in rules by the Wisconsin Department of Natural Resources under s. NR 151.004, Wis. Adm. Code.

#### **Sec. 10-52. Findings of Fact.**

Calumet County finds that uncontrolled, post-construction runoff has a significant impact upon water resources and the health, safety and general welfare of the community and diminishes the public enjoyment and use of natural resources. Specifically, uncontrolled post-construction runoff can:

- (a) Degrade physical stream habitat by increasing stream bank erosion, increasing streambed scour, diminishing groundwater recharge, diminishing stream base flows and increasing stream temperature.
- (b) Diminish the capacity of lakes and streams to support fish, aquatic life, recreational and water supply uses by increasing pollutant loading of sediment, suspended solids, nutrients, heavy metals, bacteria, pathogens and other urban pollutants.
- (c) Alter wetland communities by changing wetland hydrology and by increasing pollutant loads.
- (d) Reduce the quality of groundwater by increasing pollutant loading.
- (e) Threaten public health, safety, property and general welfare by overtaxing storm sewers, drainage ways, and other minor drainage facilities.
- (f) Threaten public health, safety, property and general welfare by increasing major flood peaks and volumes.
- (g) Undermine floodplain management efforts by increasing the incidence and levels of flooding.

**Sec. 10-53. Purpose and Intent.**

- (a) **PURPOSE.** The general purpose of this ordinance is to establish long-term, post-construction runoff management requirements that will diminish the threats to public health, safety, welfare and the aquatic environment. Specific purposes are to:
  - (1) Further the maintenance of safe and healthful conditions.
  - (2) Prevent and control the adverse effects of stormwater; prevent and control soil erosion; prevent and control water pollution; protect spawning grounds, fish and aquatic life; control building sites, placement of structures and land uses; preserve ground cover and scenic beauty; and promote sound economic growth.
  - (3) Control exceedance of the safe capacity of existing drainage facilities and receiving water bodies; prevent undue channel erosion; control increases in the scouring and transportation of particulate matter; and prevent conditions that endanger downstream property.
- (b) **INTENT.** It is the intent of Calumet County that this ordinance regulates post-construction stormwater discharges to waters of the state. This ordinance may be applied on a site-by-site basis. Calumet County recognizes, however, that the preferred method of achieving the stormwater performance standards set forth in this ordinance is through the preparation and implementation of comprehensive, systems-level stormwater management plans that cover hydrologic units, such as watersheds, on a municipal and regional scale. Such plans may prescribe regional stormwater devices, practices or systems, any of which may be designed to treat runoff from more than one site prior to discharge to waters of the state. Where such plans are in conformance with the performance standards developed under s. 281.16, Wis. Stats., for regional stormwater management measures and have been approved by the Calumet County Land & Water Conservation Department, it is the intent of this ordinance that the approved plan be used to identify post-construction management measures acceptable for the community.

**Sec. 10-54. Applicability and Jurisdiction.**

- (a) **APPLICABILITY.**
  - (1) Where not otherwise limited by law, this ordinance applies to all post-construction sites, unless the site is otherwise exempt under 10-54(a)(2).

- (2) A post-construction site that meets any of the following criteria is exempt from the requirements of this ordinance.
  - a. 1- and 2-family residential dwellings that are not part of a larger common plan of development or sale and that result in less than 1 acre of disturbance.
  - b. Non-point discharges from agricultural activity areas.
  - c. Non-point discharges from silviculture activities.
  - d. Mill and crush operations.
- (3) Notwithstanding the applicability requirements in 10-54(a)(1), this ordinance applies to post-construction sites of any size that, in the opinion of the Calumet County Land & Water Conservation Department, is likely to result in runoff that exceeds the safe capacity of the existing drainage facilities or receiving body of water, that causes undue channel erosion, that increases water pollution by scouring or the transportation of particulate matter or that endangers property or public safety.

(b) JURISDICTION.

This ordinance applies to post-construction sites within the unincorporated areas of Calumet County.

(c) EXCLUSIONS

This ordinance is not applicable to activities conducted by a state agency, as defined under s. 227.01 (1), Wis. Stats., but also including the office of district attorney, which is subject to the state plan promulgated or a memorandum of understanding entered into under s. 281.33 (2), Wis. Stats.

**Note to users:** The Wisconsin Department of Transportation (WisDOT) has entered into a memorandum of understanding with the Wisconsin Department of Natural Resources that satisfies s. 281.33 (2), Wis. Stats., such that activities directed and supervised by WisDOT are exempt from this ordinance.

**Sec. 10-55. Definitions.**

*Adequate sod, or self-sustaining vegetative cover* means maintenance of sufficient vegetation types and densities such that the physical integrity of the streambank or lakeshore is preserved. Self-sustaining vegetative cover includes grasses, forbs, sedges and duff layers of fallen leaves and woody debris.

*Administering authority* means a governmental employee, or a regional planning commission empowered under s. 59.693; Wis. Stats., that is designated by Calumet County to administer this ordinance.

*Agricultural activity area* means the part of the farm where there is planting, growing, cultivating and harvesting of crops for human or livestock consumption and pasturing or outside yarding of livestock, including sod farms and silviculture. Practices in this area may include waterways, drainage ditches, diversions, terraces, farm lanes, excavation, filling and similar practices. The agricultural activity area does not include the agricultural production area.

*Agricultural production area* means the part of the farm where there is concentrated production activity or impervious surfaces. Agricultural production areas include buildings, driveways, parking areas, feed storage structures, manure storage structures, and other impervious surfaces. The agricultural production area does not include the agricultural activity area.

*Average annual rainfall* means a calendar year of precipitation, excluding snow, which is considered typical. For purposes of this ordinance, average annual rainfall means measured precipitation in Green Bay, Wisconsin between March 29 and November 25, 1969.

*Best management practice or BMP* means structural or non-structural measures, practices, techniques or devices employed to avoid or minimize soil, sediment or pollutants carried in runoff to waters of the state.

*Business day* means a day the office of the Calumet County Land & Water Conservation Department is routinely and customarily open for business.

*Cease and desist order* means a court-issued order to halt land disturbing construction activity that is being conducted without the required permit.

*Combined sewer system* means a system for conveying both sanitary sewage and stormwater runoff.

*Common plan of development or sale* means a development or sale where multiple separate and distinct land disturbing construction activities may be taking place at different times on different schedules but under one plan. A common plan of development or sale includes, but is not limited to, subdivision plats, certified survey maps, and other developments.

*Connected imperviousness* means an impervious surface connected to the waters of the state via a separate storm sewer, an impervious flow path, or a minimally pervious flow path.

*Construction site* means an area upon which one or more land disturbing construction activities occur, including areas that are part of a larger common plan of development or sale.

*Design storm* means a hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency, and total depth of rainfall. The Atlas 14 MSE4 24-hour design storms for Calumet County are: 1-year, 2.14 inches; 2-year, 2.47 inches; 5-year, 3.06 inches; 10-year, 3.6 inches; 25-year, 4.45 inches; and 100-year, 5.96 inches.

*Development* means residential, commercial, industrial, institutional, or other land uses and associated roads.

*Direct conduits to groundwater* means wells, sinkholes, swallets, fractured bedrock at the surface, sand or gravel surficial deposits, mine shafts, nonmetallic mines, tile inlets discharging to groundwater, quarries or depressional groundwater recharge areas over shallow fractured bedrock.

*Division of land* means the creation from one or more parcels or building sites of additional parcels or building sites where such creation occurs at one time or through the successive partition within a 5-year period.

*Effective infiltration area* means the area of the infiltration system that is used to infiltrate runoff and does not include the area used for site access, berms or pretreatment.

*Erosion* means the process by which the land's surface is worn away by the action of wind, water, ice or gravity.

*Exceptional resource waters* means waters listed in s. NR 102.11, Wis. Adm. Code.

*Existing development* means development in existence on October 1, 2004 or development for which a stormwater permit in accordance with subch. III of Ch. NR 216, Wis. Adm. Code, was received on or before October 1, 2004.

*Extraterritorial* means the unincorporated area within 3 miles of the corporate limits of a first, second, or third class city, or within 1.5 miles of a fourth class city or village.

*Filtering layer* means soil that has at least a 3-foot deep layer with at least 20 percent fines; or at least a 5-foot deep layer with at least 10 percent fines; or an engineered soil with an equivalent level of protection as determined by the Calumet County Land & Water Conservation Department for the site.

*Final stabilization* means that all land disturbing construction activities at the construction site have been completed and that a uniform, perennial, vegetative cover has been established, with a density of at least 70% of the cover, for the unpaved areas and areas not covered by permanent structures, or that employ equivalent permanent stabilization measures.

*Financial guarantee* means a performance bond, maintenance bond, surety bond, irrevocable letter of credit, or similar guarantees submitted to the Calumet County Land & Water Conservation Department by the responsible party to assure that requirements of the ordinance are carried out in compliance with the stormwater management plan.

*Governing body* means town board of supervisors, county board of supervisors, city council, village board of trustees or village council.

*Groundwater* means any of the waters of the state, as defined in s.281.01 (18), Wis. Stats. occurring in a saturated subsurface geological formation of rock or soil.

*High Groundwater Level or Subsurface Saturation* means the higher of either the elevation to which the soil is saturated as observed as a free water surface in an unlined hole, or the elevation to which the soil has been seasonally or periodically saturated as indicated by soil color patterns throughout the soil profile.

*Highway* has the meaning given in s. 340.01 (22), Wis. Stats.

*Highway reconditioning* has the meaning given in s. 84.013 (1)(b), Wis. Stats.

*Highway reconstruction* has the meaning given in s. 84.013(1)(c), Wis. Stats.

*Highway resurfacing* has the meaning given in s. 84.013(1)(d), Wis. Stats.

*Impervious surface* means an area that releases as runoff all or a large portion of the precipitation that falls on it, except for frozen soil. Rooftops, sidewalks, driveways, parking lots and streets are examples of surfaces that typically are impervious. Gravel surfaces are considered impervious, unless specifically designed to encourage infiltration.

*Impervious surface disturbance* means any land disturbing construction activity in which any new impervious surfaces are created or existing impervious surfaces are redeveloped.

*In-fill* means an undeveloped area of land or new development area located within an existing urban sewer service area, surrounded by development or development and natural or man-made features where development cannot occur. "In-fill" does not include any undeveloped area that was part of a larger new development for which a stormwater permit in accordance with subch. III of ch. NR 216, Wis. Adm. Code, was required to be submitted after October 1, 2004 to the Wisconsin Department of Natural Resources or Wisconsin Department of Safety and Professional Services (formerly Department of Commerce).

*Infiltration* means the entry and movement of precipitation or runoff into or through soil.

*Infiltration system* means a device or practice such as a basin, trench, rain garden or swale designed specifically to encourage infiltration, but does not include natural infiltration in pervious surfaces such as lawns, redirecting of rooftop downspouts onto lawns or minimal infiltration from practices, such as swales or road side channels designed for conveyance and pollutant removal only.

*Land disturbing construction activity or disturbance* means any man-made alteration of the land surface resulting in a change in the topography or existing vegetative or non-vegetative soil cover, that may result in runoff and lead to an increase in soil erosion and movement of pollutants into the municipal separate storm sewer or waters of the state. Land disturbing construction activity includes clearing and grubbing, demolition, excavating, pit trench dewatering, filling and grading activities, and soil stockpiling.

*Maintenance agreement* means a legal document that provides for long-term maintenance of stormwater management and best management practices.

*MEP or maximum extent practicable* means the highest level of performance that is achievable but is not equivalent to a performance standard identified within this ordinance. Maximum extent practicable applies when the permit applicant demonstrates to the Calumet County Land & Water Conservation Department's satisfaction that a performance standard is not achievable and that a lower level of performance is appropriate. In making the assertion that a performance standard is not achievable and that a level of performance different from the performance standard is the maximum extent practicable, the permit applicant shall take into account the best available technology, cost effectiveness, geographic features, and other competing interests such as protection of public safety and welfare, protection of endangered and threatened resources, and preservation of historic properties.

*Minor reconstruction of a highway* means reconstruction of a highway that is limited to 1.5 miles in continuous or aggregate total length of realignment and that does not exceed 100 feet in width of roadbed

widening, and that does not include replacement of a vegetated drainage system with a non-vegetated drainage system except where necessary to convey runoff under a highway or private road or driveway.

*MSE4* means a rainfall distribution as established by the Natural Resources Conservation Service using Atlas 14 rainfall data provided by the National Oceanic & Atmospheric Administration which is incorporated by reference for this ordinance. The distribution is applicable for Calumet County.

*Navigable waters and navigable waterway* has the meaning given in s. 30.01(4m), Wis. Stats.

*New development* means that portion of a post-construction site where impervious surfaces are being created or expanded. Any disturbance where the amount of impervious area for the post-development condition is greater than the pre-development condition is classified as new development. For purposes of this ordinance, a post-construction site is classified as new development, redevelopment, routine maintenance, or some combination of these three classifications as appropriate.

*Off-site* means located outside the property boundary described in the permit application.

*On-site* means located within the property boundary described in the permit application.

*Ordinary high-water mark* has the meaning given in s. NR 115.03(6), Wis. Adm. Code.

*Outstanding resource waters* means waters listed in s. NR 102.10, Wis. Adm. Code.

*Percent fines* means the percentage of a given sample of soil, which passes through a # 200 sieve.

- o **Note to users:** Percent fines can be determined using the “American Society for Testing and Materials”, volume 04.02, “Test Method C117-95 Standard Test Method for Materials Finer than 75- $\mu$ m (No. 200) Sieve in Material Aggregates by Washing”. Copies can be obtained by contacting the American society for testing and materials, 100 Barr Harbor Drive, Conshohocken, PA 19428-2959, or phone 610-832-9585, or online at: “<http://www.astm.org/>”.

*Performance standard* means a narrative or measurable number specifying the minimum acceptable outcome for a facility or practice.

*Permit* means a written authorization made by the Calumet County Land & Water Conservation Department to the applicant to conduct land disturbing construction activity or to discharge post-construction runoff to waters of the state.

*Permit administration fee* means a sum of money paid to the Calumet County Land & Water Conservation Department by the permit applicant for the purpose of recouping the expenses incurred by the authority in administering the permit.

*Pervious surface* means an area that releases as runoff a small portion of the precipitation that falls on it. Lawns, gardens, parks, forests or other similar vegetated areas are examples of surfaces that typically are pervious.

*Pollutant* has the meaning given in s. 283.01(13), Wis. Stats.

*Pollution* has the meaning given in s. 281.01(10), Wis. Stats.

*Post-construction site* means a construction site following the completion of land disturbing construction activity and final site stabilization.

*Post-development* means the extent and distribution of land cover types present after the completion of land disturbing construction activity and final site stabilization.

*Pre-development* means the extent and distribution of land cover types present before the initiation of land disturbing construction activity, assuming that all land uses prior to development activity are managed in an environmentally sound manner.

*Preventive action limit* has the meaning given in s. NR 140.05(17), Wis. Adm. Code.

*Redevelopment* means that portion of a post-construction site where impervious surfaces are being reconstructed, replaced, or reconfigured. Any disturbance where the amount of impervious area for the post-development condition is equal to or less than the pre-development condition is classified as redevelopment. For purposes of this ordinance, a post-construction site is classified as new development, redevelopment, routine maintenance, or some combination of these three classifications as appropriate.

*Responsible party* means any entity holding fee title to the property or other person contracted or obligated by other agreement to implement and maintain post-construction stormwater BMPs.

*Routine maintenance* means that portion of a post-construction site where pre-development impervious surfaces are being maintained to preserve the original line and grade, hydraulic capacity, drainage pattern, configuration, or purpose of the facility. Remodeling of buildings and resurfacing of parking lots, streets, driveways, and sidewalks are examples of routine maintenance, provided the lower ½ of the impervious surface's granular base is not disturbed. The disturbance shall be classified as redevelopment if the lower ½ of the granular base associated with the pre-development impervious surface is disturbed or if the soil located beneath the impervious surface is exposed. For purposes of this ordinance, a post-construction site is classified as new development, redevelopment, routine maintenance, or some combination of these three classifications as appropriate.

*Runoff* means stormwater or precipitation including rain, snow or ice melt or similar water that moves on the land surface via sheet or channelized flow.

*Sediment* means settleable solid material that is transported by runoff, suspended within runoff or deposited by runoff away from its original location.

*Separate storm sewer* means a conveyance or system of conveyances including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, constructed channels or storm drains, which meets all of the following criteria:

- Is designed or used for collecting water or conveying runoff.
- Is not part of a combined sewer system.
- Is not part of a publicly owned wastewater treatment works that provides secondary or more stringent treatment.
- Discharges directly or indirectly to waters of the state.

*Silviculture activities* means activities including tree nursery operations, tree harvesting operations, reforestation, tree thinning, prescribed burning, and pest and fire control. Clearing and grubbing of an area of a construction site is not a silviculture activity.

*Site* means the entire area included in the legal description of the land on which the land disturbing construction activity occurred.

*Stop work order* means an order issued by the Calumet County Land & Water Conservation Department which requires that all construction activity on the site be stopped.

*Stormwater management plan* means a comprehensive plan designed to reduce the discharge of pollutants from stormwater after the site has undergone final stabilization following completion of the construction activity.

*Stormwater management system plan* is a comprehensive plan designed to reduce the discharge of runoff and pollutants from hydrologic units on a regional or municipal scale.

*Targeted performance standard* means a performance standard that will apply in a specific area, where additional practices beyond those contained in this ordinance, are necessary to meet water quality standards. A total maximum daily load is an example of a targeted performance standard.

*Technical standard* means a document that specifies design, predicted performance and operation and maintenance specifications for a material, device or method.

*Top of the channel* means an edge, or point on the landscape, landward from the ordinary high-water mark of a surface water of the state, where the slope of the land begins to be less than 12% continually for at least 50 feet. If the slope of the land is 12% or less continually for the initial 50 feet, landward from the ordinary high-water mark, the top of the channel is the ordinary high-water mark.

*Total maximum daily load or TMDL* means the amount of pollutants specified as a function of one or more water quality parameters, that can be discharged per day into a water quality limited segment and still ensure attainment of the applicable water quality standard.

*TR-55* means the United States Department of Agriculture, Natural Resources Conservation Service (previously Soil Conservation Service), Urban Hydrology for Small Watersheds, Second Edition, Technical Release 55, June 1986, which is incorporated by reference for this ordinance.

*Transportation facility* means a public street, a public road, a public highway, a railroad, a public mass transit facility, a public-use airport, a public trail, or any other public work for transportation purposes such as harbor improvements under s. 85.095(1)(b), Wis. Stats. "Transportation facility" does not include building sites for the construction of public buildings and buildings that are places of employment that are regulated by the Wisconsin Department of Natural Resources pursuant to s. 281.33, Wis. Stats.

*Type II distribution* means a rainfall type curve as established in the "United States Department of Agriculture, Soil Conservation Service, Technical Paper 149, published 1973", which is incorporated by reference for this ordinance. The Type II curve is applicable to all of Wisconsin and represents the most intense storm pattern.

*Waters of the state* has the meaning given in s. 283.01 (20), Wis. Stats.

#### **Sec. 10-56. Technical Standards.**

The following methods shall be used in designing and maintaining the water quality, peak discharge, infiltration, protective area, fueling / vehicle maintenance, and swale treatment components of stormwater practices needed to meet the water quality standards of this ordinance:

- (a) Technical standards identified, developed or disseminated by the Wisconsin Department of Natural Resources under subchapter V of chapter NR 151, Wis. Adm. Code.
- (b) Technical standards and guidance identified within the Calumet County Stormwater Reference Guide.
- (c) Where technical standards have not been identified or developed by the Wisconsin Department of Natural Resources, other technical standards may be used provided that the methods have been approved by the Calumet County Land & Water Conservation Department.
- (d) In this ordinance, the following year and location has been selected as average annual rainfall(s): Green Bay, 1969 (Mar. 29-Nov. 25).

#### **Sec. 10-57. Performance Standards.**

- (a) RESPONSIBLE PARTY. The responsible party shall develop and implement a post-construction stormwater management plan that incorporates the requirements of this section.
- (b) PLAN. A written stormwater management plan shall be developed and implemented by the responsible party in accordance with 10-59. The stormwater management plan shall meet all of the applicable requirements contained in this ordinance.
- (c) REQUIREMENTS. The stormwater management plan shall meet the following minimum requirements to the maximum extent practicable:
  - (1) WATER QUALITY. BMPs shall be designed, installed and maintained to control pollutants carried in runoff from the post-construction site. The design shall be based on the average annual rainfall, as compared to no runoff management controls.
    - a. For post-construction sites with 1 acre or more of land disturbance, the following is required:

1. Except as provided in 10-57(c)(1)a2, a pollutant reduction is required as follows:

Watershed	Total Suspended Solids (TSS) & Total Phosphorus (TP) Reduction					
	New Development		Redevelopment		Routine Maintenance	
	TSS	TP	TSS	TP	TSS	TP
All non TMDL watersheds	80%	N/A	40%	N/A	40%	N/A
Garners Creek TMDL	80%	69%	40%	69%	40%	69%
Kankapot Creek TMDL	80%	41%	40%	41%	40%	41%
Plum Creek TMDL	80%	41%	40%	41%	40%	41%
East River TMDL	80%	41%	40%	41%	40%	41%

2. A pollutant reduction is not required for routine maintenance areas that are part of a post-construction site with less than 5 acres of disturbance.
  - b. For post-construction sites with less than 1 acre of disturbance, not in a TMDL watershed, reduce the pollutant load using BMPs from the Calumet County Stormwater Reference Guide or other practices approved by the Calumet County Land & Water Conservation Department.
  - c. Sites, including common plan of development sites, with accumulative addition of 20,000 square feet or greater of impervious surfaces after October 1, 2008 are required to satisfy the performance standards within 10-57(c)(1)a1. and 2.
  - d. The amount of pollutant control previously required for the site shall not be reduced as a result of the proposed development or disturbance.
  - e. When designing BMPs, runoff draining to the BMP from offsite areas shall be taken into account in determining the treatment efficiency of the practice. Any impact on the BMP efficiency shall be compensated for by increasing the size of the BMP accordingly. The pollutant load reduction provided by the BMP for an offsite area shall not be used to satisfy the required onsite pollutant load reduction, unless otherwise approved by the Calumet County Land & Water Conservation Department in accordance with 10-57(e).
  - f. If the design cannot meet the water quality performance standards of 10-57(c)(1)a. through e., the stormwater management plan shall include a written, site specific explanation of why the water quality performance standard cannot be met and why the pollutant load will be reduced only to the maximum extent practicable. Except as provided in 10-57(f), the Calumet County Land & Water Conservation Department may not require any person to exceed the applicable water quality performance standard to meet the requirements of maximum extent practicable.

- g. *Exemptions.* The water quality performance standards do not apply to the following:
1. For municipalities that are regulated under subch. I of NR 216, Wis. Adm. Code, the water quality performance standard for a highway reconstruction project first applies January 1, 2017.
  2. Agricultural production areas.

**Note to users:** Pollutant loading models such as SLAMM, P8 or equivalent methodology may be used to evaluate the efficiency of the design in reducing pollutant loads.

(2) **PEAK DISCHARGE.** BMPs shall be designed, installed and maintained to control peak discharges from post-construction sites and agricultural production areas.

- a. For post-construction sites and agricultural production areas with one or more of the following:
- 20,000 square feet or more of impervious surface disturbance and/or creation.
  - post construction sites with 1 acre or more of land disturbance the following is required:
1. The peak post-development discharge rate shall not exceed the peak pre-development discharge rate for the 1-year, 2-year, 10-year, and 100-year, 24-hour design storms. These peak discharge requirements apply to new development and redevelopment areas. No peak discharge control is required for routine maintenance areas, unless runoff from the routine maintenance area discharges into a proposed peak flow control facility.
  2. TR-55 methodology shall be used for peak discharge calculations, unless the administering authority approves an equivalent methodology. The meaning of “hydrologic soil group” and “runoff curve number” are as determined in TR-55. Unless the site is currently woodland, peak pre-development discharge rates shall be determined using the following runoff curve numbers for a “meadow” vegetative cover:

Maximum Pre-Development Runoff Curve Numbers				
Vegetative Cover	Hydrologic Soil Group			
	A	B	C	D
Meadow	30	58	71	78
Woodland	30	55	70	77

- b. For post-construction sites and agricultural production areas with less than 20,000 square feet of impervious surface disturbance, prepare a plan that shows how the peak post-development discharge rates are reduced using BMPs from the Calumet County Stormwater Reference Guide. If 90% of the proposed impervious discharges to BMPs; these sites are not required to satisfy a numeric performance standard.
- c. Sites with a cumulative addition of 20,000 square feet or greater of impervious surfaces after October 1<sup>st</sup>, 2008 are required to satisfy the performance standards within 10-57(c)(2)a1. and 2.

- d. The amount of peak discharge control previously required for the site shall not be reduced as a result of the proposed development or disturbance.
- e. When designing BMPs, runoff draining to the BMP from offsite areas shall be taken into account in determining the performance of the practice. Any impact on the BMP performance shall be compensated for by increasing the size of the BMP accordingly. The peak discharge reduction provided by the BMP for an offsite area shall not be used to satisfy the required onsite peak discharge reduction, unless otherwise approved by the Calumet County Land & Water Conservation Department in accordance with 10-57(e).
- f. An adequate outfall shall be provided for each point of concentrated discharge and shall:
  - a. Consist of non-erosive discharge velocities and reasonable downstream conveyance.
  - b. Discharge to the municipal separate storm sewer system, waters of the state, or appropriate drainage easement. Sites not able to meet this requirement shall diffuse the concentrated discharge within the site boundary using BMPs from the Calumet County Reference Guide or other practices approved by the Calumet County Land and Water Conservation Department.
- g. All new development sites shall have a minimum 1 foot of vertical separation between the lowest floor surface and the high ground water level and/or bedrock as defined in 10-55 and described in the Stormwater Reference Guide.
 

Sites not able to meet this separation shall quantify the anticipated amount of groundwater that will be discharged to the surface. System-wide management of the proposed groundwater discharge shall be required. All BMPs shall be approved by the Calumet County Land & Water Conservation Department and indicated on the drainage plan.

A post-construction site that is near an area indicated in the Calumet County Stormwater Reference Guide as having a depth to carbonate bedrock of 50 feet or less is required to perform field verification as outlined in Wisconsin Department of Natural Resources (WDNR) Technical Standard 1002. The stormwater plan shall assess the risk to BMP failure caused by high groundwater levels or bedrock. Remediation or mitigation strategies shall be presented as part of the stormwater plan.
- h. Direct conduits to groundwater shall be identified. Direct conduits to groundwater requires a unique approach to stormwater design. If the proposed site is located within the watershed of a direct conduit to groundwater, an analysis of practical measures to avoid direct discharge shall be provided. Additional guidance may be found within the Calumet County Stormwater Reference Guide.
- i. Agricultural production areas shall meet the peak discharge performance standards by following the requirements and using the BMPs in the Calumet County Stormwater Reference Guide for agricultural production areas.
- j. *Exemptions.* The peak discharge performance standards do not apply to the following:
  - 1. A transportation facility where the discharge is directly into a lake over 5,000 acres or a stream or river segment draining more than 500 square miles.

2. Except as provided under 10-57(c)(2)d. to f., a highway reconstruction site.
  3. Except as provided under 10-57(c)(2)d. to f., a transportation facility that is part of a redevelopment project
- (3) INFILTRATION. BMPs shall be designed, installed, and maintained to infiltrate runoff from the post-construction site, except as provided in 10-57(c)(3)i. through l.
- a. For post-construction sites with 20,000 square feet or more of impervious surface disturbance and post-construction sites with 1 acre or more of land disturbance, the following is required:
    1. *Low Imperviousness.* For development up to 40 percent connected imperviousness, such as parks, cemeteries, and low density residential development, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 90 percent of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than one percent of the post-construction site is required as an effective infiltration area.
    2. *Moderate imperviousness.* For development with more than 40 percent and up to 80 percent connected imperviousness, such as medium and high density residential, multi-family development, industrial and institutional development, and office parks, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 75 percent of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2 percent of the post-construction site is required as an effective infiltration area.
    3. *High imperviousness.* For development with more than 80 percent connected imperviousness, such as commercial strip malls, shopping centers, and commercial downtowns, infiltrate sufficient runoff volume so that the post-development infiltration volume shall be at least 60 percent of the pre-development infiltration volume, based on an average annual rainfall. However, when designing appropriate infiltration systems to meet this requirement, no more than 2 percent of the post-construction site is required as an effective infiltration area.
  - b. Pre-development condition shall assume “good hydrologic conditions” for appropriate land covers as identified in TR-55 or an equivalent methodology approved by the administering authority. The meaning of “hydrologic soil group” and “runoff curve number” are as determined in TR-55. The actual pre-development vegetative cover and the following pre-development runoff curve numbers shall be used:

Maximum Pre-Development Runoff Curve Numbers				
Vegetative Cover	Hydrologic Soil Group			
	A	B	C	D
Woodland	30	55	70	77
Grassland	39	61	71	78
Cropland	55	69	78	83

**Note to users:** A model that calculates runoff volume, such as SLAMM, P8, or an equivalent methodology may be used.

- c. For post-construction sites with less than 20,000 square feet of new impervious surfaces, infiltrate runoff volume using BMPs from the Calumet County Stormwater Reference Guide. These sites are not required to satisfy a numeric performance standard.
- d. Sites with a cumulative addition of 20,000 square feet or greater of impervious surfaces after October 1<sup>st</sup>, 2008 are required to satisfy the performance standards within 10-57(c)(3)a. and b.
- e. The amount of infiltration previously required for the site shall not be reduced as a result of the proposed development or disturbance.
- f. Agricultural production areas are encouraged to infiltrate runoff volume using BMPs from the Calumet County Stormwater Reference guide.
- g. When designing BMPs, runoff draining to the BMP from offsite areas shall be taken into account in determining the performance of the practice. Any impact on the BMP performance shall be compensated for by increasing the size of the BMP accordingly. The runoff volume reduction provided by the BMP for an offsite area shall not be used to satisfy the required onsite runoff volume reduction, unless otherwise approved by the Calumet County Land & Water Conservation Department in accordance with 10-57(e).
- h. *Pretreatment.* Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from road construction in commercial, industrial and institutional areas that will enter an infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging prior to scheduled maintenance and to protect groundwater quality in accordance with 10-57(c)(3)n. Pretreatment options may include, but are not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips.
- i. *Source area prohibitions.* Runoff from the following areas may not be infiltrated and may not qualify as contributing to meeting the requirements of 10-57(c)(3) unless demonstrated to meet the conditions of 10-57(c)(3)n.
  - 1. Areas associated with a tier 1 industrial facility identified in s. NR 216.21(2)(a), Wis. Adm. Code, including storage, loading, and parking. Rooftops may be infiltrated with the concurrence of the Calumet County Land & Water Conservation Department.
  - 2. Storage and loading areas of a tier 2 industrial facility identified in s. NR 216.21(2)(b), Wis. Adm. Code.

**Note to users:** Runoff from the employee and guest parking and rooftop areas of a tier 2 facility may be infiltrated but runoff from the parking area may require pretreatment.
  - 3. Fueling and vehicle maintenance areas. Rooftops of fueling and vehicle maintenance areas may be infiltrated with the concurrence of the Calumet County Land & Water Conservation Department.
  - 4. Untreated runoff from agricultural production areas that contain livestock, animal waste, or feed storage.
- j. *Source area exemptions.* Runoff from the following areas may be credited toward meeting the requirement when infiltrated, but the decision to infiltrate runoff from these sources is optional:

1. Parking areas and access roads less than 5,000 square feet for commercial development.
  2. Parking areas and access roads less than 5,000 square feet for industrial development not subject to the prohibitions under 10-57(c)(3)i.
  3. Except as provided under 10-57(c)(3)e., redevelopment and routine maintenance areas.
  4. In-fill development areas less than 5 acres.
  5. Roads in commercial, industrial and institutional land uses, and arterial residential roads.
  6. Except as provided under 10-57(c)(3)e., transportation facility highway reconstruction and new highways.
- k. *Prohibitions.* Infiltration practices may not be located in the following areas:
1. Areas within 1,000 feet up gradient or within 100 feet downgradient of direct conduits to groundwater.
  2. Areas within 400 feet of a community water system well as specified in s. NR 811.16(4), Wis. Adm. Code, or within the separation distances listed in s. NR 812.08, Wis. Adm. Code, for any private well or non-community well for runoff infiltrated from commercial, including multi-family residential, industrial, and institutional land uses or regional devices for one- and two-family residential development.
  3. Areas where contaminants of concern, as defined in s. NR 720.03(2), Wis. Adm. Code, are present in the soil through which infiltration will occur.
- i. *Separation distances.* Infiltration practices shall be located so that the characteristics of the soil and the separation distance between the bottom of the infiltration system and the elevation of seasonal high groundwater or the top of bedrock are in accordance with the following:

Separation Distances and Soil Characteristics		
Source Area	Separation Distance	Soil Characteristics
Industrial, Commercial, Institutional Parking Lots and Roads	5 feet or more	Filtering Layer
Residential Arterial Roads	5 feet or more	Filtering Layer
Roofs Draining to Subsurface Infiltration Practices	1 foot or more	Native or Engineered Soil with Particles Finer than Coarse Sand
Roofs Draining to Surface Infiltration Practices	Not Applicable	
All Other Impervious Source Areas	3 feet or more	Filtering Layer

Notwithstanding 10-57(c)(3)i., applicable requirements for injection wells classified under ch. NR 815, Wis. Adm. Code, shall be followed.

- m. *Alternate uses.* Where alternate uses of runoff are employed, such as for toilet flushing, laundry or irrigation or storage on green roofs where an equivalent portion of the runoff is captured permanently by rooftop vegetation, such alternate use shall be given equal credit toward the infiltration volume required by 10-57(c)(3).
- n. *Groundwater standards.*
  - 1. Infiltration systems designed in accordance with this 10-57(c)(3) shall, to the extent technically and economically feasible, minimize the level of pollutants infiltrating to groundwater and shall maintain compliance with the preventive action limit at a point of standards application in accordance with ch. NR 140, Wis. Adm. Code. However, if site specific information indicates that compliance with a preventive action limit is not achievable, the infiltration BMP may not be installed or shall be modified to prevent infiltration to the maximum extent practicable.
  - 2. Notwithstanding 10-57(c)(3)n1., the discharge from BMPs shall remain below the enforcement standard at the point of standards application.
- o. Where the conditions of 10-57(c)(3)i. through l. limit or restrict the use of infiltration practices, the performance standard of 10-57(c)(3) shall be met to the maximum extent practicable.
- p. *Exemptions*
  - 1. Agricultural production areas. Agricultural production areas may choose to use infiltration practices that meet the requirements of 10-57(c)(3), but are not required to.

(4) PROTECTIVE AREAS.

- a. "Protective area" means an area of land that commences at the top of the channel of lakes, streams and rivers, or at the delineated boundary of wetlands, and that is the greatest of the following widths, as measured horizontally from the top of the channel or delineated wetland boundary to the closest impervious surface. However, in 10-57(c)(4), "protective area" does not include any area of land adjacent to any stream enclosed within a pipe or culvert, such that runoff cannot enter the enclosure at this location.
  - 1. For outstanding resource waters and exceptional resource waters, 75 feet.
  - 2. For perennial and intermittent streams identified on a United States geological survey 7.5-minute series topographic map, or a county soil survey map, whichever is more current, 50 feet.
  - 3. For lakes, 50 feet.
  - 4. For wetlands not subject to 10-57(c)(4)a5. or 6., 50 feet.
  - 5. For highly susceptible wetlands, 75 feet. Highly susceptible wetlands include the following types: calcareous fens, sedge meadows, open and coniferous bogs, low prairies, coniferous swamps, lowland hardwood swamps, and ephemeral ponds.
  - 6. For moderately susceptible wetlands, 50 feet. Moderately susceptible wetlands include, but are not limited to: shrub wetlands, floodplain forests, fresh wet meadows, deep/shallow marshes, and forested wetlands. perennial and intermittent streams also fit in this protective area designation.

7. For less susceptible wetlands, 10 percent of the average wetland width, but no less than 10 feet nor more than 30 feet. Less susceptible wetlands include: degraded wetlands dominated by invasive species such as reed canary grass; cultivated hydric soils; and any gravel pits, or dredged material or fill material disposal sites that take on the attributes of a wetland.
8. In 10-57(c)(4)a4. to 6., determinations of the extent of the protective area adjacent to wetlands shall be made on the basis of the sensitivity and runoff susceptibility of the wetland in accordance with the standards and criteria in s. NR 103.03, Wis. Adm. Code.
9. Wetlands shall be delineated. Wetland boundary delineations shall be made in accordance with s. NR 103.08(1m), Wis. Adm. Code. 10-57(c)(4) does not apply to wetlands that have been completely filled in compliance with all applicable state and federal regulations. The protective area for wetlands that have been partially filled in compliance with all applicable state and federal regulations shall be measured from the wetland boundary delineation after fill has been placed. Where there is a legally authorized wetland fill, the protective area standard need not be met in that location.
10. For concentrated flow channels with drainage areas greater than 130 acres, 10 feet.
11. Notwithstanding 10-57(c)(4)a1. to 9., the greatest protective area width shall apply where rivers, streams, lakes, and wetlands are contiguous.

**Note to users:** A stream or lake is not eligible for a lower protective area width even if contiguous to a less susceptible wetland.

- b. 10-57(c)(4) applies to all post-construction sites located within a protective area, except those areas exempted pursuant to 10-57(c)(4)e.
- c. The following requirements shall be met:
  1. Impervious surfaces shall be kept out of the protective area entirely or to the maximum extent practicable. If there is no practical alternative to locating an impervious surface in the protective area, the stormwater management plan shall contain a written, site-specific explanation.
  2. Where land disturbing construction activity occurs within a protective area, adequate sod or self-sustaining vegetative cover of 70 percent or greater shall be established and maintained where no impervious surface is present. The adequate sod or self-sustaining vegetative cover shall be sufficient to provide for bank stability, maintenance of fish habitat, and filtering of pollutants from upslope overland flow areas under sheet flow conditions. Non-vegetative materials, such as rock riprap, may be employed on the bank as necessary to prevent erosion, such as on steep slopes or where high velocity flows occur.
  3. Best management practices such as filter strips, swales, or wet detention ponds, that are designed to control pollutants from non-point sources, may be located in the protective area.
- d. A protective area established or created after October 1<sup>st</sup>, 2008 shall not be eliminated or reduced, except as allowed in 10-57(c)(4)e2., 3., or 4.
- e. *Exemptions.* The following areas are not required to meet the protective area requirements of 10-57(c)(4):

1. Redevelopment and routine maintenance areas provided the minimum requirements within 10-57(c)(4)d. are satisfied.
  2. Structures that cross or access surface waters such as boat landings, bridges and culverts.
  3. Structures constructed in accordance with s. 59.692(1v), Wis. Stats.
  4. Areas of post-construction sites from which the runoff does not enter the surface water, including wetlands, without first being treated by a BMP to meet the requirements of 10-57(c)(1) and (2), except to the extent that vegetative ground cover is necessary to maintain bank stability.
- (5) **FUELING AND VEHICLE MAINTENANCE AREAS.** Fueling and vehicle maintenance areas shall have BMPs designed, installed and maintained to reduce petroleum within runoff, so that the runoff that enters waters of the state contains no visible petroleum sheen, or to the maximum extent practicable.

**Note to users:** A combination of the following BMPs may be used: oil and grease separators, canopies, petroleum spill cleanup materials, or any other structural or non-structural method of preventing or treating petroleum in runoff.

- (6) **SWALE TREATMENT FOR TRANSPORTATION FACILITIES.** This 10-57(c)(6) is not applicable to transportation facilities that are part of a larger common plan of development or sale.
- a. *Requirement.* Except as provided in 10-57(c)(6)b., transportation facilities that use swales for runoff conveyance and pollutant removal are exempt from the requirements of 10-57(c)(1), (2), and (3), if the swales are designed to do all of the following or to the maximum extent practicable:
    1. Swales shall be vegetated. However, where appropriate, non-vegetative measures may be employed to prevent erosion or provide for runoff treatment, such as rock riprap stabilization or check dams.
    2. Swales shall comply with the Wisconsin Department of Natural Resources Technical Standard 1005, "Vegetated Infiltration Swale", except as otherwise authorized in writing by the Wisconsin Department of Natural Resources.
  - b. *Other Requirements.* Notwithstanding 10-57(c)(6)a., the Calumet County Land & Water Conservation Department may, consistent with water quality standards, require that other requirements, in addition to swale treatment, be met on a transportation facility with an average daily traffic rate greater than 2,500 and where the initial surface water of the state that the runoff directly enters is any of the following:
    1. An outstanding resource water.
    2. An exceptional resource water.
    3. Waters listed in section 303(d) of the Federal Clean Water Act that are identified as impaired in whole or in part, due to nonpoint source impacts.
    4. Waters where targeted performance standards are developed pursuant to s. NR 151.004, Wis. Adm. Code.
- (7) **EXEMPTIONS.** The following areas are not required to meet the performance standards within 10-57(c):

- a. Underground utility construction such as water, sewer, gas, electric, telephone, cable television, and fiber optic lines. This exemption does not apply to the construction of any above ground structures associated with utility construction.
  - b. The following transportation facilities are exempt, provided the transportation facility is not part of a larger common plan of development or sale.
    - 1. A transportation facility post-construction site with less than 10 percent connected imperviousness, based on the area of land disturbance, provided the cumulative area of all impervious surfaces is less than one acre. Notwithstanding this exemption, the protective area requirements of 10-57(c)(4) still apply.
    - 2. Reconditioning or resurfacing of a highway.
    - 3. Minor reconstruction of a highway. Notwithstanding this exemption, the protective area requirements of 10-57(c)(4) apply to minor reconstruction of a highway.
    - 4. Routine maintenance for transportation facilities that have less than 5 acres of land disturbance if performed to maintain the original line and grade, hydraulic capacity or original purpose of the facility.
    - 5. Routine maintenance if performed for stormwater conveyance system cleaning.
- (d) **GENERAL CONSIDERATIONS FOR ON-SITE AND OFF-SITE STORMWATER MANAGEMENT MEASURES.** The following considerations shall be observed in managing runoff:
- (1) Natural topography and land cover features such as natural swales, natural depressions, native soil infiltrating capacity, and natural groundwater recharge areas shall be preserved and used, to the extent possible, to meet the requirements of this section.
  - (2) Emergency overland flow for all stormwater facilities shall be provided to prevent exceeding the safe capacity of downstream drainage facilities and prevent endangerment of downstream property or public safety.
  - (3) While not required, measures such as widening the safety shelf or fencing to enhance safety may be considered for practices with a permanent pool.
- (e) **BMP LOCATION AND CREDIT.**
- (1) **GENERAL.** To comply with 10-57(c) performance standards, the BMPs may be located on-site or off-site as part of a regional stormwater device, practice or system.
  - (2) **OFFSITE OR REGIONAL BMP.**
    - a. The amount of credit that the Calumet County Land & Water Conservation Department may give an offsite or regional BMP for purposes of determining compliance with the performance standards of 10-57(c) is limited to the treatment capability or performance of the BMP.
    - b. The Calumet County Land & Water Conservation Department may authorize credit for an off-site or regional BMP provided all of the following conditions are satisfied:
      - 1. The BMP received all applicable permits.
      - 2. The BMP shall be installed and operational before the construction site has undergone final stabilization.
      - 3. The BMP shall be designed and adequately sized to provide a level of stormwater control equal to or greater than that which would be afforded by on-site BMPs meeting the 10-57(c) performance standards.

4. The owner of the BMP has entered into a 10-60 maintenance agreement with Calumet County, or another municipal entity, such that the BMP has a legally obligated entity responsible for its long-term operation and maintenance. Legal authority exists if a municipality owns, operates and maintains the BMP.
  5. The owner of the BMP has provided written authorization which indicates the permit applicant may use the BMP for 10-57(c) performance standard compliance.
  6. Where an off-site or regional BMP option exists such that the Calumet County Land & Water Conservation Department exempts the applicant from all or part of the minimum on-site stormwater management requirements, the applicant shall be required to pay a fee in an amount determined in negotiation with the Calumet County Land & Water Conservation Department. In determining the fee for post-construction runoff, the Calumet County Land & Water Conservation Department shall consider an equitable distribution of the cost for land, engineering design, construction, and maintenance of the off-site or regional BMP.
- (3) **BMP IN NON-NAVIGABLE WATERS.** For purposes of determining compliance with the performance standards of 10-57(c), the Calumet County Land & Water Conservation Department may give credit for BMPs that function to provide treatment for runoff from existing development and post-construction runoff from new development, redevelopment, and routine maintenance areas and that are located within non-navigable waters.
- (4) **BMP IN NAVIGABLE WATERS.**
- a. *New Development Runoff.* Except as allowed under 10-57(e)(4)b., BMPs designed to treat post-construction runoff from new development areas may not be located in navigable waters and, for purposes of determining compliance with the performance standards of 10-57(c), the Calumet County Land & Water Conservation Department may not give credit for such BMPs.
  - b. *New Development Runoff Exemption.* BMPs to treat post-construction runoff from new development areas may be located within navigable waters and may be creditable by the Calumet County Land & Water Conservation Department under 10-57(c), if all the following are met:
    1. The BMP was constructed prior to October 1, 2002 and received all applicable permits.
    2. The BMP functions or will function to provide runoff treatment for the new development area.
  - c. *Existing Development & Post-Construction Runoff from Redevelopment, Routine Maintenance, & Infill Development Areas.* Except as provided in 10-57(e)(4)d., BMPs designed to treat post-construction runoff for existing development and post-construction runoff from redevelopment, routine maintenance and infill development areas may not be located in navigable waters and, for purposes of determining compliance with the performance standards of 10-57(c), the Calumet County Land & Water Conservation Department may not give credit for such BMPs.
  - d. *Existing Development & Post-Construction Runoff from Redevelopment, Routine Maintenance, & Infill Development Areas Exemption.* BMPs that function to provide treatment of runoff from existing development and post-construction runoff from redevelopment, routine maintenance and infill development areas may be located within navigable waters and, for purposes of determining compliance with the performance standards of 10-57(c), the Calumet County

Land & Water Conservation Department may give credit for such BMPs, if any of the following are met:

1. The BMP was constructed, contracts were signed or bids advertised and all applicable permits were received prior to January 1, 2011.
  2. The BMP is on an intermittent waterway and all applicable permits are received.
- (5) WATER QUALITY TRADING. To comply with 10-57(c)(1) performance standards, the Calumet County Land & Water Conservation Department may authorize credit for water quality trading provided all of the following conditions are satisfied:
- a. The treatment practices associated with a water quality trade shall be in place, effective and operational before credit can be authorized.
  - b. The water quality trade shall comply with applicable trading ratios established by the Wisconsin Department of Natural Resources or Calumet County.
  - c. The water quality trade shall comply with applicable regulations, standards, and guidance developed by the Wisconsin Department of Natural Resources or Calumet County.
  - d. The responsible party shall furnish a copy of executed water quality trading agreements or other related information deemed necessary by the Calumet County Land & Water Conservation Department in order to authorize credit.
- (f) TARGETED PERFORMANCE STANDARDS. The Calumet County Land & Water Conservation Department may establish numeric water quality requirements that are more stringent than those set forth in 10-57(c) in order to meet targeted performance standards, total maximum daily loads, and/or water quality standards for a specific water body or area. The numeric water quality requirements may be applicable to any permitted site, regardless of the size of land disturbing construction activity.
- (g) ALTERNATE REQUIREMENTS. The Calumet County Land & Water Conservation Department may establish stormwater management requirements more stringent than those set forth in this section if the Calumet County Land & Water Conservation Department determines that an added level of protection is needed to protect sensitive resources. Also, the Calumet County Land & Water Conservation Department may establish stormwater management requirements less stringent than those set forth in this section if the Calumet County Land & Water Conservation Department determines that less protection is needed to protect sensitive resources and provide reasonable flood protection. However, the alternative requirements shall not be less stringent than those requirements promulgated in rules by Wisconsin Department of Natural Resources under NR 151 Wisconsin Administrative Code.

#### **Sec. 10-58. Permitting Requirements, Procedures and Fees.**

- (a) PERMIT REQUIRED. No responsible party may undertake a land disturbing construction activity without receiving a post-construction runoff permit from the Calumet County Land & Water Conservation Department prior to commencing the proposed activity.
- (b) PERMIT APPLICATION AND FEES. Unless specifically excluded by this ordinance, any responsible party desiring a permit shall submit to the Calumet County Land & Water Conservation Department a permit application made on a form provided by the Calumet County Land & Water Conservation Department for that purpose.
  - (1) Unless otherwise accepted by this ordinance, a permit application must be accompanied by a stormwater management plan, a maintenance agreement and a non-refundable permit administration fee.
  - (2) The stormwater management plan shall be prepared to meet the requirements of 10-57 and 10-59, the maintenance agreement shall be prepared to meet the requirements of

10-60, the financial guarantee shall meet the requirements of 10-61, and fees shall be those established by Calumet County as set forth in 10-62.

- (c) **REVIEW AND APPROVAL OF PERMIT APPLICATION.** The Calumet County Land & Water Conservation Department shall review any permit application that is submitted with a stormwater management plan, maintenance agreement, and the required fee. The following approval procedure shall be used:
- (1) Within 20 business days of the receipt of a complete permit application, including all items as required by 10-58(b), the Calumet County Land & Water Conservation Department shall inform the applicant whether the application, plan and maintenance agreement are approved or disapproved based on the requirements of this ordinance.
  - (2) If the stormwater permit application, plan and maintenance agreement are approved, or if an agreed upon payment of fees in lieu of stormwater management practices is made pursuant to 10-57(e), the Calumet County Land & Water Conservation Department shall issue the permit.
  - (3) If the stormwater permit application, plan or maintenance agreement is disapproved, the Calumet County Land & Water Conservation Department shall detail in writing the reasons for disapproval.
  - (4) The Calumet County Land & Water Conservation Department may request additional information from the applicant. If additional information is submitted, the Calumet County Land & Water Conservation Department shall have 20 business days from the date the additional information is received to inform the applicant that the plan and maintenance agreement are either approved or disapproved.
  - (5) Failure by the Calumet County Land & Water Conservation Department to inform the permit applicant of a decision within 20 business days of a required submittal shall be deemed to mean approval of the submittal and the applicant may proceed as if a permit had been issued.
- (d) **PERMIT REQUIREMENTS.** All permits issued under this ordinance shall be subject to the following conditions, and holders of permits issued under this ordinance shall be deemed to have accepted these conditions. The Calumet County Land & Water Conservation Department may suspend or revoke a permit for violation of a permit condition, following written notification of the responsible party. An action by the Calumet County Land & Water Conservation Department to suspend or revoke this permit may be appealed in accordance with 10-64.
- (1) Compliance with this permit does not relieve the responsible party of the responsibility to comply with other applicable federal, state, and local laws and regulations.
  - (2) The responsible party shall design and install all structural and non-structural stormwater management measures in accordance with the approved stormwater management plan and this permit.
  - (3) The responsible party shall notify the Calumet County Land & Water Conservation Department at least 2 business days before commencing any work in conjunction with the stormwater management plan, and within 2 business days upon completion of the stormwater management practices. If required as a special condition under 10-58(e), the responsible party shall make additional notification according to a schedule set forth by the Calumet County Land & Water Conservation Department so that practice installations can be inspected during construction.
  - (4) Practice installations required as part of this ordinance shall be certified "as built" by a licensed professional engineer. Completed stormwater management practices must pass a final inspection by the Calumet County Land & Water Conservation Department or its designee to determine if they are in accordance with the approved stormwater management plan and ordinance. The Calumet County Land & Water Conservation

Department or its designee shall notify the responsible party in writing of any changes required in such practices to bring them into compliance with the conditions of this permit.

- (5) The responsible party shall notify the Calumet County Land & Water Conservation Department of any significant modifications it intends to make to an approved stormwater management plan. The Calumet County Land & Water Conservation Department may require that the proposed modifications be submitted to it for approval prior to incorporation into the stormwater management plan and execution by the responsible party.
  - (6) The responsible party shall inspect BMPs annually and after runoff events in accordance with stormwater management plan reference in section 10-59(a). The responsible party shall have a licensed professional submit a stamped written inspection report to Calumet County Land & Water Conservation Department for review and approval every five years. All reports shall accompany the stamped report.
  - (7) The responsible party shall maintain all stormwater management practices in accordance with the stormwater management plan until the practices either become the responsibility of Calumet County, or are transferred to subsequent private owners as specified in the approved maintenance agreement.
  - (8) The responsible party authorizes the Calumet County Land & Water Conservation Department to perform any work or operations necessary to bring stormwater management measures into conformance with the approved stormwater management plan, and consents to a special assessment or charge against the property as authorized under subch. VII of ch. 66, Wis. Stats., or to charging such costs against the financial guarantee posted under 10-61.
  - (9) If so directed by the Calumet County Land & Water Conservation Department, the responsible party shall repair at the responsible party's own expense all damage to adjoining municipal facilities and drainage ways caused by runoff, where such damage is caused by activities that are not in compliance with the approved stormwater management plan.
  - (10) The responsible party shall permit property access to the Calumet County Land & Water Conservation Department or its designee for the purpose of inspecting the property for compliance with the approved stormwater management plan and this permit.
  - (11) Where site development or redevelopment involves changes in direction, increases in peak rate and/or total volume of runoff from a site, the Calumet County Land & Water Conservation Department may require the responsible party to make appropriate legal arrangements with affected property owners concerning the prevention of endangerment to property or public safety.
  - (12) The responsible party is subject to the enforcement actions and penalties detailed in 10-63, if the responsible party fails to comply with the terms of this permit.
  - (13) The permit applicant shall post the "Certificate of Permit Coverage" in a conspicuous location at the construction site.
- (e) PERMIT CONDITIONS. Permits issued under this subsection may include conditions established by Calumet County Land & Water Conservation Department in addition to the requirements needed to meet the performance standards in 10-57 or a financial guarantee as provided for in 10-61.
- (f) PERMIT DURATION. Permits issued under this section shall be valid from the date of issuance through the date the Calumet County Land & Water Conservation Department notifies the responsible party that all stormwater management practices have passed the final inspection required under 10-58(d)(4).
- (g) ALTERNATE REQUIREMENTS. The Calumet County Land & Water Conservation Department may prescribe alternative requirements for applicants seeking an exemption to on-site stormwater

management performance standards under 10-57(e) or for applicants seeking a permit for a post-construction site with less than 20,000 square feet of impervious surface disturbance.

**Sec. 10-59. Stormwater Management Plan.**

- (a) **PLAN REQUIREMENTS.** The stormwater management plan required under 10-57(b) and 10-58(b) shall comply with the Calumet County Stormwater Reference Guide and contain at a minimum the following information:
  - (1) Name, address, and telephone number of the landowner and responsible parties.
  - (2) A legal description of the property proposed to be developed.
  - (3) Pre-development site map with property lines, disturbed limits, and drainage patterns.
  - (4) Post-development site map with property lines, disturbed limits, and drainage patterns.
    - a. Total area of disturbed impervious surfaces within the site.
    - b. Total area of new impervious surfaces within the site.
    - c. Performance standards applicable to site.
    - d. Proposed best management practices.
    - e. Groundwater, bedrock, and soil limitations.
    - f. Separation distances. Stormwater management practices shall be adequately separated from wells to prevent contamination of drinking water.
  - (5) Inspection and maintenance schedules of stormwater BMPs.
- (b) **ALTERNATE REQUIREMENTS.** The Calumet County Land & Water Conservation Department may prescribe alternative submittal requirements for applicants seeking an exemption to on-site stormwater management performance standards under 10-57(e) or for applicants seeking a permit for a post-construction site with less than 20,000 square feet of impervious surface disturbance.

**Sec. 10-60. Maintenance Agreement.**

- (a) **MAINTENANCE AGREEMENT REQUIRED.** The maintenance agreement required under 10-58(b) for stormwater management practices shall be an agreement between Calumet County and the responsible party to provide for maintenance of stormwater practices beyond the duration period of this permit. The maintenance agreement shall be filed with the County Register of Deeds as a property deed restriction so that it is binding upon all subsequent owners of the land served by the stormwater management practices.
- (b) **AGREEMENT PROVISIONS.** The maintenance agreement shall contain the following information and provisions and be consistent with the plan required by 10-58(b):
  - (1) Identification of the stormwater facilities and designation of the drainage area served by the facilities.
  - (2) A schedule for regular inspection and maintenance of each aspect of the stormwater management system consistent with the stormwater management plan required under 10-58(b).
  - (3) Identification of the responsible party(s), organization or city, county, town or village responsible for long term maintenance of the stormwater management practices identified in the stormwater management plan required under 10-58(b).
  - (4) Requirement that the responsible party(s), organization, or city, county, town or village shall maintain stormwater management practices in accordance with the schedule included in 10-60(b)(2).
  - (5) Authorization for the Calumet County Land & Water Conservation Department to access the property to conduct inspections of stormwater management practices as necessary to

ascertain that the practices are being maintained and operated in accordance with the agreement.

- (6) A requirement on the Calumet County Land & Water Conservation Department to maintain public records of the results of the site inspections, to inform the responsible party responsible for maintenance of the inspection results, and to specifically indicate any corrective actions required to bring the stormwater management practice into proper working condition.
  - (7) Agreement that the party designated under 10-60(b)(3), as responsible for long term maintenance of the stormwater management practices, shall be notified by the Calumet County Land & Water Conservation Department of maintenance problems which require correction. The specified corrective actions shall be undertaken within a reasonable time frame as set by the Calumet County Land & Water Conservation Department.
  - (8) Authorization of the Calumet County Land & Water Conservation Department to perform the corrected actions identified in the inspection report if the responsible party designated under 10-60(b)(3) does not make the required corrections in the specified time period. The Calumet County Land & Water Conservation Department shall enter the amount due on the tax rolls and collect the money as a special charge against the property pursuant to subch. VII of ch. 66, Wis. Stats.
- (c) ALTERNATE REQUIREMENTS. The Calumet County Land & Water Conservation Department may prescribe alternative requirements for applicants seeking an exemption to on-site stormwater management performance standards under 10-57(e) or for applicants seeking a permit for a post-construction site with less than 20,000 square feet of impervious surface disturbance.

#### **Sec. 10-61. Financial Guarantee.**

- (a) ESTABLISHMENT OF THE GUARANTEE. The Calumet County Land & Water Conservation Department may require the submittal of a financial guarantee, the form and type of which shall be acceptable to the Calumet County Land & Water Conservation Department. The financial guarantee shall be in an amount determined by the Calumet County Land & Water Conservation Department to be the estimated cost of construction and the estimated cost of maintenance of the stormwater management practices during the period which the designated party in the maintenance agreement has maintenance responsibility. The financial guarantee shall give the Calumet County Land & Water Conservation Department the authorization to use the funds to complete the stormwater management practices if the responsible party defaults or does not properly implement the approved stormwater management plan, upon written notice to the responsible party by the Calumet County Land & Water Conservation Department that the requirements of this ordinance have not been met.
- (b) CONDITIONS FOR RELEASE. Conditions for the release of the financial guarantee are as follows:
  - (1) The Calumet County Land & Water Conservation Department shall release the portion of the financial guarantee established under this section, less any costs incurred by the Calumet County Land & Water Conservation Department to complete installation of practices, upon submission of "as built plans" by a licensed professional engineer. The Calumet County Land & Water Conservation Department may make provisions for a partial pro-rata release of the financial guarantee based on the completion of various development stages.
  - (2) The Calumet County Land & Water Conservation Department shall release the portion of the financial guarantee established under this section to assure maintenance of stormwater practices, less any costs incurred by the Calumet County Land & Water

Conservation Department, at such time that the responsibility for practice maintenance is passed on to another entity via an approved maintenance agreement.

- (c) **ALTERNATE REQUIREMENTS.** The Calumet County Land & Water Conservation Department may prescribe alternative requirements for applicants seeking an exemption to on-site stormwater management performance standards under 10-57(e) or for applicants seeking a permit for a post-construction site with less than 20,000 square feet of impervious surface disturbance.

**Sec. 10-62. Fee Schedule.**

The fees referred to in other sections of this ordinance shall be established by the Calumet County Land & Water Conservation Department and may from time to time be modified by resolution. A schedule of the fees established by the Calumet County Land & Water Conservation Department shall be available for review in the Land & Water Conservation Department.

**Sec. 10-63. Enforcement.**

- (a) Any land disturbing construction activity or post-construction runoff initiated after the effective date of this ordinance by any person, firm, association, or corporation subject to the ordinance provisions shall be deemed a violation unless conducted in accordance with the requirements of this ordinance.
- (b) The Calumet County Land & Water Conservation Department shall notify the responsible party by certified mail of any non-complying land disturbing construction activity or post-construction runoff. The notice shall describe the nature of the violation, remedial actions needed, a schedule for remedial action, and additional enforcement action which may be taken.
- (c) Upon receipt of written notification from the Calumet County Land & Water Conservation Department under sub. (b), the responsible party shall correct work that does not comply with the stormwater management plan or other provisions of this permit. The responsible party shall make corrections as necessary to meet the specifications and schedule set forth by the Calumet County Land & Water Conservation Department in the notice.
- (d) If the violations to a permit issued pursuant to this ordinance are likely to result in damage to properties, public facilities, or waters of the state, the Calumet County Land & Water Conservation Department may enter the land and take emergency actions necessary to prevent such damage. The costs incurred by the Calumet County Land & Water Conservation Department plus interest and legal costs shall be billed to the responsible party.
- (e) The Calumet County Land & Water Conservation Department is authorized to post a stop work order on all land disturbing construction activity that is in violation of this ordinance, or to request the corporation counsel to obtain a cease and desist order in any court with jurisdiction.
- (f) The Calumet County Land & Water Conservation Department may revoke a permit issued under this ordinance for non-compliance with ordinance provisions.
- (g) Any permit revocation, stop work order, or cease and desist order shall remain in effect unless retracted by the Calumet County Land & Water Conservation Department or by a court with jurisdiction.
- (h) The Calumet County Land & Water Conservation Department is authorized to refer any violation of this ordinance, or of a stop work order or cease and desist order issued pursuant to this ordinance, to the corporation counsel for the commencement of further legal proceedings in any court with jurisdiction.

- (i) Any person, firm, association, or corporation who does not comply with the provisions of this ordinance shall be subject to a forfeiture of not less than 50 dollars or more than 500 dollars per offense, together with the costs of prosecution. Each day that the violation exists shall constitute a separate offense.
- (j) Compliance with the provisions of this ordinance may also be enforced by injunction in any court with jurisdiction. It shall not be necessary to prosecute for forfeiture or a cease and desist order before resorting to injunction proceedings.
- (k) When the Calumet County Land & Water Conservation Department determines that the holder of a permit issued pursuant to this ordinance has failed to follow practices set forth in the stormwater management plan, or has failed to comply with schedules set forth in said stormwater management plan, the Calumet County Land & Water Conservation Department or a party designated by the Calumet County Land & Water Conservation Department may enter upon the land and perform the work or other operations necessary to bring the condition of said lands into conformance with requirements of the approved plan. The Calumet County Land & Water Conservation Department shall keep a detailed accounting of the costs and expenses of performing this work. These costs and expenses shall be deducted from any financial security posted pursuant to 10-61 of this ordinance. Where such a security has not been established, or where such a security is insufficient to cover these costs, the costs and expenses shall be entered on the tax roll as a special charge against the property and collected with any other taxes levied thereon.

**Sec. 10-64. Appeals.**

- (a) The Calumet County Land Conservation Committee shall hear and decide appeals where it is alleged that there is error in any order, decision or determination made by the Calumet County Land & Water Conservation Department in administering this ordinance. Upon appeal, the board may authorize variances from the provisions of this ordinance that are not contrary to the public interest, and where owing to special conditions a literal enforcement of the ordinance will result in unnecessary hardship.
- (b) WHO MAY APPEAL? Appeals to the Land Conservation Committee may be taken by any aggrieved person or by an officer, department, board, or bureau of Calumet County affected by any decision of the Calumet County Land & Water Conservation Department.

**Sec. 10-65. Severability.**

If any section, clause, provision or portion of this ordinance is judged unconstitutional or invalid by a court of competent jurisdiction, the remainder of the ordinance shall remain in force and not be affected by such judgment.