

**State of Wisconsin
Department of Natural Resources**

**Responses to Comments
Model Ordinances for Construction Site Erosion and Sediment Control
and Post-Construction Storm Water Management
Guidance #3800-2015-05**

April 2015

On February 20, 2015, the Wisconsin Department of Natural Resources (Department) issued a public notice on proposed “Model Ordinances for Construction Site Erosion and Sediment Control and Post-Construction Storm Water Management” guidance. The Department received several comments on the proposed guidance. Thank you to all for taking the time to review and comment on the proposed guidance. This document represents the Department’s response to the written comments on the guidance. To facilitate the responses, the Department may have paraphrased, rephrased, condensed, or consolidated comments.

PUBLIC COMMENTS

Comments by City of Fitchburg

Comment 1: Thanks for your work on the model ordinances for Construction Site Erosion and Sediment Control and Post-Construction Storm Water Management. In the Post-Construction Storm Water Management Model Ordinance, the old references to the Type II Rainfall Distribution were changed to the MSE3 and MSE4 Rainfall Distributions. Could you explain why there are still references to Type II distributions in the Construction Site Erosion and Sediment Control Model Ordinance? I'm assuming this may just be an oversight; however, if DNR wants us to use different rainfall distributions for each ordinance, it would be helpful to include the reasons why in the guidance document.

Response: DNR has removed reference to the Type II rainfall distribution from the model ordinance, except where the local authority chooses to allow on a case-by-case basis. S. 06 (2) on page 12 now reads: *Soil loss prediction tools (such as the Universal Soil Loss Equation (USLE)) when using an appropriate rainfall or runoff factor (also referred to as the R factor) or an appropriate design storm and precipitation distribution, and when considering the geographic location of the site and the period of disturbance.*

The USDA program that was named the Soil Conservation Service (SCS) is now the Natural Resource Conservation Service (NRCS). Chapter NR 151, Wis. Adm. Code, refers to a USDA-SCS Type II rainfall distribution which was considered the appropriate rainfall distribution to use throughout Wisconsin since its publication in 1973. However USDA-NRCS-Wisconsin has determined that the SCS Type II rainfall distribution should not be used with Atlas 14 data and instead has created new precipitation distributions using Atlas 14 data. USDA-NRCS-Wisconsin has determined which precipitation distribution (MSE3 or MSE4) should be used in each Wisconsin county. When ch. NR 151, Wis. Adm. Code, is revised in the future, DNR will remove

the reference to a Type II rainfall distribution, as the appropriate NRCS MSE3 or MSE4 precipitation distribution should be used with Atlas 14.

Comments by City of Madison

Comment 1: #27 under definitions is to define “Type II distribution” – this is now out of date – does State code refer to Type II distribution such that it would not be replaced by the new Atlas 14 info from NRCS? Any place Type II should be replaced with the new NRCS method(s)?

Response: Please see the Department response to City of Fitchburg comment 1.

Comments by North East Wisconsin Stormwater Consortium (NEWS)

CONSTRUCTION SITE EROSION & SEDIMENT CONTROL ORDINANCE

1. **Chapter Name (page 5)** – Please change the Chapter name to “Construction Site Erosion and Sediment Control”, rather than “Construction Site Erosion and Sedimentation”.

Response: The chapter name was edited to read: *CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL*.

2. **S.03 Purpose (page 6)** – Please delete the phrase “and sedimentation”. The ordinance purpose is not to prevent sedimentation, but rather to encourage sedimentation.

Response: To keep the intent of encouraging sedimentation on-site, the Department edited the phrase to read: *prevent and control soil erosion and sediment discharge*.

3. **S.04(1)(b)1 (page 6)** – Please modify the transportation applicability section. The ordinance implies that transportation facilities are exempt. Transportation facilities are not exempt from construction site performance standards pursuant to NR 151.105(2), NR 151.225(1)(a) and (c), and NR 151.23(1)(b).

Response: The construction site transportation facility performance standards in subch. IV of NR 151, Wis. Adm. Code, apply to transportation-related projects undertaken by a public entity and are not intended for private development, which are subject to the construction site performance standards in subch. III of NR 151, Wis. Adm. Code. A municipality is required to comply with the construction site transportation facility performance standards in subch. IV of NR 151, Wis. Adm. Code, for its own transportation-related projects. However, because the intent of the model ordinance is to provide guidance to municipalities on ordinance development applicable to third parties, the Department purposely excludes these performance standards from the model ordinance. If a municipality has regulatory authority over the activities of another local unit of government, it may be appropriate to include the construction site transportation facility performance standards in ss. NR 151.225(3) and 151.23(4m), Wis. Adm. Code, in its ordinance if those types of projects occur. To clarify this issue, the following language has been added after the existing sentence in the Note to Users under S. 04(1)(b)1. on page 7: *Notwithstanding this ordinance, a municipality is required to comply with the construction site transportation facility performance standards in subch. IV of NR 151, Wis. Adm. Code, for its own transportation-*

related projects. If a municipality has regulatory authority over the activities of another local unit of government, it may be appropriate to include the construction site transportation facility performance standards in ss. NR 151.225(3) and 151.23(4m), Wis. Adm. Code, in its ordinance if those types of projects occur.

4. **S.04(1)(b)5 (page 7)** – Please modify the routine maintenance applicability section. The ordinance implies that routine maintenance sites are exempt. Routine maintenance sites are not exempt from construction site performance standards pursuant to NR 151.105(2) and NR 151.225(1)(b).

Response: The construction site performance standards in ss. NR 151.105 and 151.225, Wis. Adm. Code, apply to construction sites that the Department does not regulate under Subch. III of NR 216, Wis. Adm. Code, or “non-permitted sites”.

The construction site performance standards in s. NR 151.105, Wis. Adm. Code, for non-permitted sites are reflected in S. 07, and the model ordinance indicates that this section is optional. The reference to routine maintenance in the applicability section of the model ordinance reflects the exemption in s. NR 151.11(3(e), Wis. Adm. Code, for construction sites where one acre or more of land disturbing construction activity occurs. A municipality may choose to include the optional S. 07 at its discretion.

The Department purposely excludes the construction site transportation facility performance standards in s. NR 151.225, Wis. Adm. Code, for non-permitted sites. However, if a municipality has regulatory authority over the activities of another local unit of government, it may be appropriate to include construction site transportation facility performance standards. Please see the NEWSOC construction site comment 3 and Department response, above.

5. **S.05 Definitions (pages 8 to 10)** – Please use the exact definition provided in NR 151 for “construction site” and “waters of the state”.

Response: “Construction site” definition was revised to read exactly as provided in ch. NR 151, Wis. Adm. Code: *“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 where multiple separate and distinct land disturbing construction activities may be taking place at different times on different schedules but under one plan. A long-range planning document that describes separate construction projects, such as a 20-year transportation improvement plan, is not a common plan of development.*

The “waters of the state” definition was revised to read (pursuant to s. 281.01 (18), Wis. Stats): *“Waters of the state” includes those portions of Lake Michigan and Lake Superior within the boundaries of this state, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private, within this state or its jurisdiction.*

6. **S.05 Definitions (pages 8 to 10)** – Please add the NR 151 definition for the following terms: landowner, silviculture, etc. Similar to NR 151, these terms are used in the model ordinance.

Response: The following terms, which are defined in ch. NR 151, Wis. Adm. Code, and used in the Construction Site Erosion and Sediment Control ordinance, were added to S. 05 Definitions: *"Landowner" means any person holding fee title, an easement or other interest in property, which allows the person to undertake cropping, livestock management, land disturbing construction activity or maintenance of storm water BMPs on the property; and "Silviculture activity" 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.*

7. **S.05 Definitions (page 10)** – Please delete the definition for “Type II distribution”.

Response: The definition has been deleted. Please see the Department response to City of Fitchburg comment 1.

8. **S.055 Applicability of Maximum Extent Practicable (page 10)** – Similar to maximum extent practicable, consider adding the NR 151.004 text regarding targeted performance standards including a definition for targeted performance standard.

Response: The implementation of state targeted performance standards is the responsibility of the Department, whereas the municipality does not have the authority to implement state targeted performance standards of their own. Therefore, no changes were made by the Department to the guidance in response to this comment.

9. **S.08(1) Responsible Party (page 12)** – Similar to S.07(1), please use the NR 151.11(4) text for S.08(1). The text used in the model ordinance seems more appropriate for S.08(2).

Response: The Department revised the “responsible party” definition to reflect the responsible party language pursuant to s. NR 151.11 (4), Wis. Adm. Code, and the “landowner” definition added in response to NEWSC comment 6, above. In both model ordinances’ S. 05 Definitions, the “responsible party” definition now reads: *“Responsible party” means the landowner or any other entity performing services to meet the requirements of this ordinance through a contract or other agreement.* Therefore, with “responsible party” defined, in both model ordinances S. 07 (1) was revised to read: *RESPONSIBLE PARTY. The responsible party shall comply with this section.* In the Construction Site Erosion and Sediment Control model ordinance S. 08 (1) was revised to read: *RESPONSIBLE PARTY. The responsible party shall comply with this section and implement the erosion and sediment control plan developed in accordance with S. 10*.*

10. **S.10(2)(c)5 Erosion & Sediment Control Plan Requirements (page 17)** – Please delete this requirement. NR 151.11(6m)(b)2 requires 5 tons per acre per year after January 1, 2013. As such, the percent reduction requirement is no longer applicable.

Response: S. 10 (2)(c)5 was revised to read: *Calculations to show the compliance with the performance standard in S. 08 (3)(b)1*. The performance standard in S. 08 (3)(b)1 is the sediment performance standard which describes no more than 5 tons per acre per year of the sediment load can be carried off in runoff. The Department is finalizing draft guidance (“Construction Site Soil Loss and Sediment Discharge Calculation Guidance” and associated “Soil Loss and Sediment Calculation Tool”) that can be used to verify compliance with the sediment performance standard for construction sites pursuant to s. NR 151.11, Wis. Adm. Code.

11. **MSWord Version** – Please release the draft ordinance in an MSWord format, not a pdf format.

Response: The PDF version will be the official guidance document. However, to facilitate drafting of local ordinances, the Department will make MSWord versions of the model ordinances available. While the model ordinances are intended to assist municipalities and provide guidance, it is the municipalities’ responsibility to use discretion in developing their ordinances.

12. **MS4 Permit Compliance** – Please provide MS4 permittees a minimum compliance schedule of 12 months for ordinance revision after the date the WDNR finalizes the model ordinance.

Response: The compliance schedule is set by the MS4 permit and cannot be altered by this guidance. However, the Department anticipates that for MS4 general permittees the final guidance will be issued 12 or more months prior to the compliance date.

POST-CONSTRUCTION STORMWATER MANAGEMENT ORDINANCE

1. **S.04(1)(b)1 Applicability & Jurisdiction (page 26)** – Please add the following sentence: “However, the exemption of this paragraph does not include exemption from the protective area standard of this ordinance.” This sentence is included in NR 151.121(2)(a).

Response: The Department added the above suggestion pursuant to s. NR 151.121 (2)(a), Wis. Adm. Code.

2. **S.05 Definitions (pages 27 to 31)** – Please add the NR 151 definition for the following terms: adequate sod or self-sustaining vegetative cover, design storm, filtering layer, landowner, percent fines, silviculture, targeted performance standards, total maximum daily load, TR-55 or runoff curve number, type II distribution, Atlas 14, NRCS MSE3 or MSE4 distribution, etc. Similar to NR 151, these terms are used in the model ordinance.

Response: The following terms, which are defined in ch. NR 151, Wis. Adm. Code, and used in the Post-Construction Storm Water Management ordinance, were added to S. 05 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; "Atlas 14" means the National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Precipitation-Frequency Atlas of the United States, Volume 8 (Midwestern States), published in 2013; "Design storm" means a hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency and total depth of rainfall; "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 regulatory authority for the site; "Landowner" means any person holding fee title, an easement or other interest in property, which allows the person to undertake cropping, livestock management, land disturbing construction activity or maintenance of storm water BMPs on the property; "NRCS MSE3 or MS4 distribution" means a specific precipitation distribution developed by the United States Department of Agriculture, Natural Resources Conservation Service, using precipitation data from Atlas 14; "Percent fines" means the percentage of a given sample of soil, which passes through a # 200 sieve; "Silviculture activity" 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; "TP-40" means Technical Paper No. 40, Rainfall Frequency Atlas of the United States, published in 1961; "Type II distribution" means a rainfall type curve as established in the "United States Department of Agriculture, Soil Conservation Service, Technical Paper 149, published in 1973". As noted in NEWSC construction site comment 9 above, "responsible party" was also edited in this section.

3. **S.05 Definitions (page 31)** – Please use the exact definition provided in NR 151 for “waters of the state”.

Response: The “waters of the state” definition was revised to read (pursuant to s. 281.01 (18), Wis. Stats): *“Waters of the state” includes those portions of Lake Michigan and Lake Superior within the boundaries of this state, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private, within this state or its jurisdiction.*

4. **S.07(3) Maintenance of Effort (page 32)** – Please replace “ss. NR 151.122 to 151.125” with “this ordinance”.

Response: The phrase “ss. NR 151.122 to 151.125” was replaced with “*this ordinance*”.

5. **S.07(4)(a) Total Suspended Solids (page 33)** – Please consider adding the following note to user: “The municipality may add additional TMDL water quality performance standards to the ordinance that are more stringent than the minimum NR 151 TSS requirements”.

Response: The Department added the following to S. 07 (4)(a): **Note to Users:** *Under s. 281.33 (6)(a)2., Wis. Stats., the municipality may enact and enforce provisions of an ordinance that are*

stricter than the TSS performance standards in ch. NR 151, Wis. Adm. Code, if the stricter provisions are necessary to comply with federally-approved total maximum daily load requirements.

6. **S.07(4)(a)3 Total Suspended Solids (page 33)** – Please replace “Off-Site Discharge” with “Off-Site Drainage”, which is consistent with NR 151.122(4) terminology.

Response: The Department corrected the terminology to “*drainage*” consistent with s. NR 151.122 (4).

7. **S.07(4)(b)1 Peak Discharge (page 33)** – Consider adding the following sentence to the end of the paragraph: “Peak discharges shall be calculated using TR-55 runoff curve number methodology, NOAA Atlas 14 precipitation depths, and the appropriate NRCS Wisconsin MSE3 or MSE4 precipitation distribution. On a case-by-case basis, the [administering authority] may allow the use of TP-40 precipitation depths and the Type II distribution.” Additional definitions are recommended to provide clarity.

Response: The following language was added to S. 07 (4)(b)1. on page 35: *Peak discharges shall be calculated using TR-55 runoff curve number methodology, Atlas 14 precipitation depths, and the appropriate NRCS Wisconsin MSE3 or MSE4 precipitation distribution. On a case-by-case basis, the [administering authority] may allow the use of TP-40 precipitation depths and the Type II distribution.* (Please see NEWSOC post-construction comment 2 above for definitions.)

8. **S.07(4)(b)2.b. Peak Discharge Exemptions (page 34)** – Please delete “A redevelopment post-construction site” and replace with “Except as provided under S.07(3), a redevelopment post-construction site.” Please refer to the peak discharge exemption identified within NR 151.123(2)(b).

Response: “A redevelopment post-construction site” was replaced with “*Except as provided under S. 07 (3), a redevelopment post-construction site*” in accordance with s. NR 151.123 (2)(b), Wis. Adm. Code.

9. **S.07(4)(b) Peak Discharge (page 34)** – Please consider adding the following note to user: “The municipality may add flood control performance standards to the ordinance that are more stringent than the minimum NR 151 peak discharge requirements”.

Response: The Department added the following to S. 07 (4)(b): **Note to Users:** *Under s. 281.33 (6)(a)1., Wis. Stats., the municipality may enact and enforce provisions of an ordinance that are stricter than the peak discharge performance standards in ch. NR 151, Wis. Adm. Code, if the stricter provisions are necessary to control storm water quantity or control flooding.*

10. **S.07(4)(c)1 Infiltration (page 34)** – Please delete the first word, “BMP”. This word appears to be a duplicate word.

Response: The Department edited the first word “BMPs” to “*Best Management Practices*” as it is structured as the subdivision heading.

11. **S.07(4)(c) Infiltration MEP (page 34)** – Please consider adding the following note to user: “The municipality may add additional water quantity performance standards to the ordinance that are more stringent than the minimum NR 151 infiltration requirements”.

Response: The Department prefers to not include this clarification with respect to the infiltration performance standards for the purposes of controlling storm water quantity or flooding. While a municipality has the ability under s. 281.33 (6)(a)1., Wis. Stats., to enact and enforce stricter provisions to control storm water quantity or control flooding, for infiltration there are other important considerations such as source areas, locations of practices, and groundwater standards.

12. **S.07(4)(c)3.a. Infiltration Prohibitions (page 35)** – Consider replacing the phrase “conditions of Wisconsin DNR groundwater standards in s. NR 151.124(6)” with the phrase “conditions identified in S.07(4)(c)6.” Subparagraph 6 in the ordinance is the same as NR 151.124(6).

Response: The phrase “conditions of Wisconsin DNR groundwater standards in s. NR 151.124 (6)” was replaced with “*conditions identified in S. 07 (4)(c)6.*”.

13. **S.07(4)(c)3.b.iii. Infiltration Exemptions (page 36)** – The redevelopment site exemption was omitted from the model ordinance. Please add the following: “Except as provided under S.07(3), redevelopment post-construction sites.” Please refer to the infiltration exemption identified within NR 151.124(3)(b)3.

Response: “*Except as provided under S. 07 (3), redevelopment post-construction sites*” was added to S. 07 (4)(c)3.b.iii., pursuant to s. NR 151.124 (3)(b)3, Wis. Adm. Code.

14. **S.07(4)(c)8. Infiltration MEP (page 38)** – Consider replacing the phrase “NR 151.124” with the phrase “S. 07 (4)(c).” Paragraph (c) in the ordinance is the same as NR 151.124.

Response: The phrase “NR 151.124” was replaced with “*S. 07 (4)(c)*”.

15. **S.07(4)(d)1.h. Protective Area (page 39)** – Please replace the phrase “current Wisconsin DNR procedures” with the phrase “s. NR 103.08 (1m).” The local municipality is not responsible for enforcing the Wisconsin DNR’s wetland procedures. Please cite a WDNR regulation, not a WDNR procedure that can be changed without a regulatory rule making process.

Response: The Department replaced the phrase “current Wisconsin DNR procedures” with “*s. NR 103.08 (1m)*” consistent with ch. NR 151, Wis. Adm. Code, terminology.

16. **S.07(4)(d)4.a. Protective Area Exemptions (page 40)** – The redevelopment site exemption was omitted from the model ordinance. Please add the following: “Except as provided under S.07(3), redevelopment post-construction sites.” Please refer to the protective area exemption identified within NR 151.125(4)(a).

Response: “*Except as provided under S. 07 (3), redevelopment post-construction sites*” was added to S. 07 (4)(d)4.a., pursuant to s. NR 151.125 (4)(a), Wis. Adm. Code.

17. **MSWord Version** – Please release the draft ordinance in an MSWord format, not a pdf format.

Response: The PDF version will be the official guidance document. However, to facilitate drafting of local ordinances, the Department will make MSWord versions of the model ordinances available. While the model ordinances are intended to assist municipalities and provide guidance, it is the municipalities’ responsibility to use discretion in developing their ordinances.

18. **MS4 Permit Compliance** – Please provide MS4 permittees a minimum compliance schedule of 12 months for ordinance revision after the date the WDNR finalizes the model ordinance.

Response: The compliance schedule is set by the MS4 permit and cannot be altered by this guidance. However, the Department anticipates that for MS4 general permittees the final guidance will be issued 12 or more months prior to the compliance date.

Comments by United State Environmental Protection Agency

Comment 1: One suggestion we might offer: The ordinance includes a definition of maximum extent practicable. This definition makes sense for the ordinance. In our effluent guidelines for construction sites we also use the phrase “unless infeasible.” And we have a definition for infeasible. You might want to think about using this wording (unless infeasible) vs. maximum extent practicable. (Although I am not sure, maybe you took the MEP phrase directly from NR 151.) The reason for our suggestion is maximum extent practicable is used in a broader way to describe a community’s overall MS4 program. It is included in the EPA regs for small MS4s. We usually use that phrase to mean, you take your program as far as you can at this point in time, but over time new technologies will be available and new systems may be developed, so what is not practicable now might be practicable in the future. We get a lot of questions about what is the definition of MEP.

Response: The Department appreciates the comment. The definition of “maximum extent practicable” is defined by s. NR 151.002 (25), Wis. Adm. Code, and we have to rely on the concept and the definition supported by ch. NR 151, Wis. Adm. Code. No changes were made by the Department in response to this comment.

AMENDMENT BY THE DEPARTMENT

The following language was added to the last paragraph in section **C. Discussion** (page 3): *Use of the model ordinances is optional. The model ordinances are intended to provide a framework for local governments to draft ordinances that meet the MS4 permit requirements for implementation and enforcement of the legal authorities in s. NR 216.07(4) and (5), Wis. Adm. Code. However, municipalities not covered under an MS4 permit may also use the models. Please be aware that the Department cannot provide legal review of local ordinances. Therefore, the Department requests that a municipality regulated under an MS4 permit pursuant to subch. I of NR 216, Wis. Adm. Code, submit a legal opinion from its corporation counsel stating that its ordinances are compliant with the MS4 permit requirements.*

The final guidance was approved on April 2, 2015.

Prepared by:

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