CR 12-027

ORDER OF THE STATE OF WISCONSIN
NATURAL RESOURCES BOARD
REPEALING, RENUMBERING, AMENDING, RECREATING AND CREATING RULES

This rule is not subject to s. 227.185, Stats. The statement of scope for this rule, published in Register 549 on September 30, 2001, was sent to LRB prior to June 8, 2011.

The Wisconsin Natural Resources Board proposes an order to repeal NR 110.03 (8) and (10), 110.05 (2), (5) (c), and (7), 110.15 (2) (c), (d) and (e), 205.07 (2) (d); to renumber NR 110.03 (6m), 110.03 (31) and 210.03 (10); to renumber and amend NR 210.03 (9m); to amend NR 110.03 (17) and (28), 110.05 (3) to (4), 110.11 (1) (d) 5., 110.15 (5) (g), 110.22 (5) (b) 2. and (c) 1., 205.03 (5), 205.07 (1) (s) (title), 1., 2.a., 3. and 4., 208.06 (1), 210.01, 210.03 (intro.) and 210.08; to repeal and recreate NR 110.03 (7), (9) and (29), 110.10 (1) (h), 110.15 (5) (d) and (h), 205.07 (1) (v), 208.05 (3) (m) and 210.02; to create NR 110.03 (6m), (6s), (7e), (7m), (7s), (26m), (27e), (27m), (27s), (29d), (29h), (30p),(32g), (32r), 110.09 (11) (note), 110.10 (4), 110.11 (1) (note), 110.13 (6), 205.03 (3m), (4m), (6e), (6m), (6s), (9m), (31g), (31r), (35e), (35m), (35s), (39g), (39r) and (43m), 205.07 (1) (u), 205.08 (1) (b) 5. (note), 208.03 (1m), 210 Subchapter I (title), 210.03 (2e), (2m), (2s), (3d). (3h), (3p), (3t), (6e), (6m), (6s), (8m), (10) (11), and (13) to (15), 210 Subchapter II (title), 210.035, 210 Subchapter III (title), 210.12, 210 Subchapter IV (title), 210.19, 210.20, 210.205, and 210.21 to 210.25 relating to wastewater treatment works.

WT-23-11

Analysis Prepared by the Department of Natural Resources

1. Statutes interpreted: Sections 281.41, 283.11, 283.31, 283.55, 283.59

2. Statutory authority: Sections 227.11, 281.41, 283.11, 283.31, 283.55

3. Explanation of agency authority:

Chapter 283 grants authority to the Department to establish, administer and maintain a Wisconsin Pollutant Discharge Elimination System (WPDES). More specifically, sections 283.11 and 283.31, Wis. Stats., provide authority to promulgate rules to administer the WPDES permit program consistent with federal requirements. Section 283.31, Wis. Stats., requires that the permittee at all times maintain in good working order and operate as efficiently as possible any facilities or systems of control installed by the permittee to achieve compliance with the permit. Section 283.55, Wis. Stats., establishes monitoring and reporting authority and requirements for permitted facilities. The Department has general authority to promulgate rules under s. 227.11 (2) (a), Wis. Stats., that interpret the specific statutory authority granted in Chapters 281 and 283, Wis. Stats. Finally, s. 281.41, Wis. Stats., provides authority to the Department to require plans and specifications for reviewable facilities as established in Chapter NR 110, Wis. Adm. Code.

4. Related statute or rule:

These rules relate directly to regulation of wastewater discharges in the Chapter NR 200 series of the Wisconsin Administrative Code. Chapter NR 205 contains the general provisions applicable to the WPDES permit program. Chapter NR 208 is the compliance maintenance rule for sewerage systems to assist owners in maintaining system integrity. Chapter NR 210 establishes effluent limitations and other requirements for sewage treatment works, including monitoring and reporting.

5. Plain language analysis:

The primary purpose of these rule additions and amendments is to establish clear regulatory requirements associated with unpermitted and potentially hazardous discharges of untreated or partially treated sewage. These discharges have generally been included under the broad definition of "bypass" in current state and federal regulations. The changes will make Wisconsin's rules conform more closely to the U.S. Environmental Protection Agency's (U.S. EPA) interpretation of federal regulations, a long-standing point of concern by that agency. The rules should also address U.S. EPA's concerns regarding existing sanitary sewer overflow (SSO) regulations. In a letter dated July 18, 2011, U.S. EPA identified 75 potential issues with Wisconsin's statutory and regulatory authority for the WPDES permit program. Wisconsin's regulation of SSOs was the first issue identified in that letter. U.S. EPA directed the Department to either make rule changes to address this inconsistency or obtain a statement from the Attorney General's Office verifying that the existing rule is consistent with federal regulations. The Department believes adoption of these rule changes will address U.S. EPA's concerns.

The rules establish provisions unique to untreated or partially treated sewage discharges and create consistency in the terminology and requirements applicable to publicly owned treatment works and privately owned facilities collecting and treating primarily sanitary sewage. Section 283.31(4)(d), Wis. Stats., requires "… the permittee shall at all times maintain in good working order and operate as efficiently as possible any facilities or systems of control installed by the permittee to achieve compliance with the terms and conditions of the permit." This is further stated in s. NR 205.07(1)(j), Wis. Adm. Code, which states that "The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control…" Therefore, because sewage collection systems are an integral part of the pollution control facilities, maintaining and operating these systems to prevent discharges of untreated sewage has been a requirement for many years.

To interpret and implement the statutory requirement for "proper operation and maintenance", the rules require that all owners of sewage collection systems (primarily municipalities) create a capacity, management, operation and maintenance (CMOM) program. The CMOM program is an effective management tool that owners use to help create sustainable sewage collection systems and prevent overflows. It assures sewage collection system owners proactively maintain this significant and valuable community infrastructure by optimizing planned maintenance and prioritizing rehabilitation or replacement activities. These implementation activities are and have been required under the general "proper operation and maintenance" requirements of existing rules. The rule revisions establish more detailed procedures for this requirement.

In this rule package, the term sewage means the wastewater from residences and commercial establishments including that from toilets, showers, laundry and other sources. In some cases, industrial wastewater that can be effectively treated by the sewage treatment facility may be discharged to the sewerage system. Sewerage systems are usually owned by municipalities and consist of a sewage collection system composed of building sewers that carry wastewater from buildings to the collector sewers in the street which, in turn, discharge into larger interceptor sewers that carry wastewater to the

sewage treatment facility. In many instances, pumping stations are necessary at various locations in the sewage collection system to lift wastewater to a higher elevation so it may flow downstream by gravity.

In addition to municipalities that own and operate both a sewage collection system and a sewage treatment facility, these rules apply to two other types of systems. Satellite sewage collection system owners do not own and operate a sewage treatment facility. Rather, these municipalities, such as an adjacent city or a sanitary district, own and operate only the sewage collection system which discharges into another municipality's sewers for treatment and disposal. Secondly, these rules also apply to a small number of privately-owned sewerage systems in the state that collect, treat and dispose of sewage (e.g., mobile home parks) or that operate as a satellite sewage collection system. The CMOM requirement also applies to these privately-owned and satellite collection systems.

Discharges of untreated or inadequately treated sewage from any place in sewage collection systems designed to collect and transport only sanitary sewage are most commonly called sanitary sewer overflows or SSOs. Systems designed to collect and transport both sanitary sewage and storm water in the same pipes are called combined sewer systems and discharges are referred to as combined sewer overflows (CSOs). Discharges of untreated sewage are a potential hazard to human health and can have significant impacts on water quality. Typically, SSOs occur as a result of either the entry of an excessive amount of precipitation or groundwater, known as infiltration/inflow (I/I) into the sanitary sewers or because there is a mechanical, electrical or structural failure in a component of the collection system.

When a sewage collection system has insufficient capacity to transport the sewage and the I/I entering the sewers, the system will relieve itself by discharging the excess flow as a SSO in one or more ways. Sewage may back up into buildings or basements through the building sewer. Sewage may also be discharged to nearby drainage-ways, to surface waters or to the land surface from sewage collection system components such as overflowing manholes or lift station overflow pipes. In some instances, sewage may be discharged, usually into surface waters, through a gravity overflow structure or a portable or permanently installed pump. Once wastewater enters the sewage treatment facility, an overflow to the land surface and into nearby surface waters may occur if a treatment unit is too small to accommodate the quantity of flow. These rules establish specific requirements applicable to sewage collection system owners that will prevent or reduce the potential for SSOs and, thereby, prevent water quality impairment and human health hazards associated with such discharges. Effective development and implementation of a CMOM program will reduce the costs incurred by a permittee when building backups cause damage to property.

Following is a brief summary of changes to chapters NR 110, NR 205, NR 208, and NR 210, Wis. Adm. Code:

Chapter NR 110, Sewerage Systems – This chapter contains design standards and requirements applicable to sewerage systems. The most significant changes to chapter NR 110 include the following:

- New terms and definitions or amended definitions for existing terms are included to assure clarity and to make them consistent with the usage of terms in chapters NR 205 and NR 210.

- Language often referred to as the "sewer ban" provisions that are associated with SSOs are repealed from this chapter. The existing rule establishes conditions under which a municipality would not be allowed to expand its sewage collection system for new development if there are significant SSO occurrences. Although potentially an effective tool, it has been difficult for the Department to implement this provision as currently structured. The Department believes it will be more effective to incorporate the "sewer ban" concept into formal enforcement actions, where

appropriate. Other conditions under which a "sewer ban" may be imposed are clarified and essentially unchanged.

- Standards are established for conducting a System Evaluation and Capacity Assurance Plan, an evaluation of the sewage collection system, which maybe required under chapter NR 210. A cross-reference to facilities plans required under the existing chapter NR 110 rule is provided to eliminate or remove the potential for duplication.

- Design requirements are established for sanitary sewer overflow structures and sewage treatment facility overflow structures.

- Several existing provisions concerning "bypasses" at sewage treatment facilities that are inconsistent with WPDES program requirements are repealed or amended.

Chapter NR 205, General Provisions – This chapter contains WPDES program definitions, general conditions applicable to WPDES permits and requirements for the issuance of WPDES general permits. Following are the significant changes to this rule:

- New terms and definitions are created. Terms and definitions correspond to those under chapters NR 110 and NR 210.

- Non-compliance reporting requirements are modified to more clearly establish reporting requirements for SSOs and sewage treatment facility overflows.

- The section on bypassing is moved to assure the provisions are inclusive for all permittees. Blending, a specifically defined type of bypassing at a sewage treatment facility, is regulated under chapter NR 210. Specific requirements are established for controlled diversions at all wastewater treatment facilities (including those treating industrial wastewater). Similar to the existing rule, other bypassing at a wastewater treatment facility is prohibited, but may be approved if specific conditions in the rule are met, such as endangerment to life, health or property or actions that are not feasible to implement.

- Reporting requirements when there is permit noncompliance are clarified, as are procedures for when scheduled or anticipated bypassing may be necessary.

Chapter NR 208, Compliance Maintenance – This chapter contains requirements for preparing and submitting compliance maintenance annual reports and requires sewerage system owners to take necessary actions to prevent non-compliance with permit requirements in the future.

- Scoring for discrete SSO occurrences is repealed. Permittees are required to provide information regarding actions taken in response to reported SSO occurrences.

Chapter NR 210, Sewage Treatment Works – This chapter contains the WPDES requirements for publicly owned treatment works (sewerage systems) and privately owned treatment works that treat primarily domestic sewage and wastewater from commercial establishments. The current rule establishes effluent limitations and monitoring/reporting requirements for sewage treatment facilities only. These provisions are the basis for WPDES terms and conditions. The revisions to this rule establish the following more specific authorities over sewage collection systems:

- New terms and definitions are created. Terms and definitions correspond to the terms used in chapters NR 110 and NR 205.

- Specific authority is clarified for the issuance of WPDES permits for satellite collection systems. The Department has been issuing permits to such systems since 1989 and has authority to do so under s. 283.31 (1), Wis. Stats.

- A specific requirement that combined sewer systems conform to the terms and conditions in the WPDES permit is established. The Department intends to include conditions in such permits that are consistent with U.S. EPA's CSO policy contained in the Clean Water Act. (33 U.S.C. 1342)

- Specific provisions are established to prohibit sanitary sewer overflows and sewage treatment facility overflows. Permittee response actions and notification requirements are established and reporting conditions for sanitary sewer and sewage treatment facility overflows are clarified. Reporting requirements are similar to those currently required in permits.

- A list of factors is established that the Department will use to determine whether a prohibited overflow has occurred and the type of enforcement action that may be taken for permit noncompliance. The specific enforcement action in response to an overflow is left to the discretion of the Department based upon a case-by-case evaluation of the information available.

- The rule creates specific provisions relating to building backups. Discrete or individual building backups are exempted from the rule requirements. However, recurring building backups caused by constraints in the downstream sewage collection system may be cause for establishing permit terms and conditions to eliminate or reduce building backups through reduction or removal of I/I or other factors causing the backups.

- The rule creates a requirement that all sewage collection system permittees establish a CMOM program to reduce or prevent the likelihood of SSOs and to ensure the long-term viability of sewage collection systems.

- The rule sets terms and conditions under which the Department may approve, through the permit issuance process, the practice of blending (diverting sewage around biological treatment units under specific conditions) at sewage treatment facilities. Blending may occur only when the WPDES permit contains a condition that allows the practice.

- The rules create a provision under which the Department may incorporate a requirement in a WPDES permit that a sewage collection system owner undertake an evaluation of the system to determine causes of the permit violations and development of a plan to address the causative factors.

6. Summary and comparison with existing and proposed federal regulations:

There are no federal regulations that correspond to chapter NR 110. The Department, however, has specific authority for plan and specification reviews and authority to establish conditions on approvals of plans under s. 281.41, Wis. Stats. The revisions to chapter NR 205 will make Wisconsin's rules more consistent with current U.S. EPA regulations and will provide a consistent interpretation of the term bypass and types of bypass events. Current chapter NR 205 language applicable to "bypassing" is contained in a section of the rule that applies only to publicly owned treatment works and, therefore, does not apply to bypasses at industrial waste treatment facilities. Federal rules do not distinguish between

publicly owned treatment works and industrial facilities. One amendment to chapter NR 205 addresses this issue.

Until recently, U.S. EPA has relied upon the bypassing language of 40 CFR 122.41(m) as the primary basis for control over SSOs. In a June 1, 2001 letter to the Department, under the heading "State Rules Relating to Bypass and Sanitary Sewer Overflows", U.S. EPA stated:

> *While NR 205.07 includes general prohibitions on unscheduled and scheduled bypassing, the exceptions to this prohibition are more liberal than allowed under Federal law. The Federal regulation at 40 CFR 122.41)m)(4)(i) states that bypass is prohibited, and the Director may take enforcement action unless each of the following three conditions apply:*
> - *The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;*
> - *There were no feasible alternatives to the bypass; and*
> - *The permittee submitted the required reporting.*
>
> *…Our chief concern with NR 205.07 is the lack of a "feasible alternatives" test….In addition, the first and third criteria under NR 205.07(u) do not, in themselves, represent sufficient grounds for allowing bypasses under Federal regulations…. We recommend you proceed with rulemaking in order to correct these discrepancies between State and Federal requirements.*

In a July 18, 2011 letter from U.S. EPA identifying seventy-five potential deficiencies of Wisconsin's WPDES permit program, U.S. EPA stated that existing state regulations regarding bypasses and diversions and reporting requirements for those events appear to be inconsistent with federal regulations (40 CFR 122.41 (m)). Also, 40 CFR 122.41 (e) requires that a permittee properly operate and maintain its sewerage system. These rules will address the inconsistency identified by U.S. EPA in that letter. More recently, U.S. EPA has suggested through various enforcement actions against a few collection system owners in Wisconsin that the "bypass" provisions are not applicable to SSOs, but solely apply only to overflows within the treatment facility and SSOs are prohibited without exception or without condition. U.S. EPA, in 2000, developed a "Compliance and Enforcement Strategy for CSOs and SSOs" (April 27, 2000) establishing CSOs and SSOs as enforcement priorities for that agency. Based on this strategy, U.S. EPA has focused their enforcement action in the state primarily on SSO events reported by Wisconsin permittees.

Given these circumstances, it seems that current federal regulations are somewhat ambiguous concerning their application to the various types of bypasses and SSOs. Certainly, inconsistency in U.S. EPA's interpretation of their regulations has created uncertainty in expectations. Therefore, revisions to chapter NR 210 will create greater specificity and consistency with respect to provisions governing SSO discharges in the state. Other changes to chapter NR 205 also make this rule more compatible with U.S. EPA regulations concerning bypasses within treatment facilities that are necessary for purposes of essential maintenance and operation, as well as addressing some discrepancies associated with anticipated or scheduled bypasses.

There is no federal regulation mandating establishment and implementation of CMOM programs. The revisions will clarify what actions permittees must take to address their SSOs and CSOs and prevent future problems. The rules also interpret and implement the requirement in s. 283.31(4) (d), Wis. Stats. This statutory section requires "… the permittee shall at all times maintain in good working order and operate as efficiently as possible any facilities or systems of control installed by the permittee to achieve compliance with the terms and conditions of the permit." Although there is no federal regulation, U.S. EPA has incorporated CMOM requirements into many enforcement actions across the country. Similarly, there is no specific federal rule regarding the issuance of permits to satellite sewage collection systems.

The practice of diverting sewage around biological treatment units at sewage treatment facilities under specific conditions and recombining or "blending" this diverted wastewater with fully treated effluent is typically used as an alternative to bypassing untreated wastewater or preventing building backups. Over the past decade, U.S. EPA has proposed on several occasions to establish guidance or regulation concerning the practice of blending. None of the U.S. EPA proposals for allowing blending have been finalized and U.S. EPA's application of the federal "bypass prohibition" rule to blending has been sporadic and inconsistent, thereby creating great uncertainty about the acceptability of this practice.

U.S. EPA provided significant comments on the proposed rules and modifications to the rules have been made in response. Under the state-federal delegation agreement for the WPDES program, U.S. EPA has the opportunity for further review once the rules are promulgated. The Department believes the rule revisions address the issues raised by many interested parties and U.S. EPA and may serve as a model for federal regulatory changes.

7. Comparison of similar rules in adjacent states:

All the other U.S. EPA Region 5 states (Illinois, Indiana, Michigan, Minnesota and Ohio) and the state of Iowa have a bypassing regulation essentially verbatim to that of U.S. EPA which has been the primary authority for responding to SSO occurrences. The general bypassing prohibition language, reporting and proper operations provisions in these state regulations are similar to current WDNR rules and permits. In some states, if a bypass occurs as a result of a specified high precipitation event, an exception is provided to the general prohibition on bypassing and SSOs. Only the Michigan Department of Natural Resources and Environment (MDNRE) has developed a more direct, detailed strategy for addressing SSOs, including a more aggressive enforcement position. However, the regulations under which MDNRE operates are similar to the federal rule. None of these states have rules relating to blending, though it is apparent from reviewing information available that this practice is not unusual at some sewage treatment facilities.

An investigation into wet weather issues sponsored by the state of Michigan and conducted by the Center for Sustainable Systems at the University of Michigan was published in December 2009[1]. On the topic of SSOs , the study presents the results of a survey in which 34 agencies (U.S. EPA Regions, states) responded. The results are summarized in the report as follows:

> 9% of respondents (3 agencies) stated that their agency issues permits allowing SSOs. 42% of the respondents (14 agencies) exercise enforcement discretion for SSOs above a set size or level. Of the 31 agencies with SSOs, only 9% (3 agencies) do not require SSOs to be eliminated. Only 37% of the respondents (11 of 30 agencies) have established standards for identifying excessive inflow and infiltration (I/I). 32% of respondents (10 of 31 agencies) allow blending of treated wastewater with a mixture of storm water and untreated sewage in one or more of their wastewater treatment plant permits.

None of the adjacent states have regulations that require development and implementation of CMOM programs for sewage collection systems. In some other parts of the United States, permitting agencies have placed CMOM requirements in some NPDES permits. No states adjacent to Wisconsin issue permits to satellite sewage collection systems. No other state's rules contain provisions similar to the SECAP portion of these rules, though it is likely compliance schedules in permits or enforcement actions in those states effectively implement preparation of such plans when sewage collection systems are not in compliance with permit conditions.

[1] Center for Sustainable Systems, School of Natural Resources and Environment, University of Michigan. "Wet Weather Benchmarking Report" December 11, 2009

Additional information on regulations or programs dealing with SSOs in other states is contained in the Economic Impact Analysis accompanying this rule package.

8. Summary of factual data and analytical methodologies:

Almost all municipalities in the state operate sanitary sewage collection systems and SSO occurrences are primarily driven by precipitation events. The Cities of Superior and Milwaukee and the Village of Shorewood (the latter two municipalities connected to the Milwaukee Metropolitan Sewerage District (MMSD)) are served, in part, by combined sewer systems. Overflows from combined sewers are also caused primarily precipitation-related events. Human exposure to untreated sewage discharges can cause disease and other health impacts, in addition to a variety of other water quality impairments. In the 3 years from 2008 through 2010, 1,139 SSO events were reported with a total discharge volume of 1,627 million gallons of untreated sewage. Most of these occurrences were caused by rainfall or precipitation-related events. U.S. EPA, in a 2004 Report to Congress[2], estimated the annual number of SSOs nationwide is between 23,000 and 75,000.

A WDNR Report to the Natural Resources Board[3] in 2001 similarly noted that SSOs were a cause for concern. The report contained recommendations for action, including improved tracking and reporting systems, development of improved rules, more aggressive enforcement responses, and outreach to permittees to improve attention devoted to sewage collection systems. Additionally, there were several recommendations relating specifically to the MMSD and their satellite communities. Most of these latter recommendations have been implemented through recent MMSD facilities planning activities and enforcement actions for overflows in 2008.

In 2002, the Department established an advisory committee to assist in developing rule amendments that would address the issues identified in the 2001 report. The advisory committee consisted of representatives from municipal sewage collection system owners, consulting engineers, environmental organizations, and U.S. EPA. Several meetings with the advisory committee were held and the Department shared rule drafts with them. Comments from the advisory committee members and others who have an interest in this topic contributed significantly to this rule package.

Over the past several years, there have been many investigations and evaluations of sewage collection system issues. Many publications are listed on the U.S. EPA web site (http://cfpub.epa.gov/npdes/home.cfm?program_id=4). The Water Environment Federation has also sponsored publication of several studies, including investigations by the Water Environment Research Foundation listed on the WEF web site (http://wef.org/AWK/pages_cs.aspx?id=1063).

As noted by the titles in the publication list below, most publications provide information and guidance to wastewater utilities on how best to manage sewage collection systems to reduce and prevent I/I so SSOs do not occur or are minimized. A partial listing of publications follows:

- Wisconsin CMOM – Capacity, Management, Operation and Maintenance. Wisconsin Department of Natural Resources, Publication No. PUB-WT-917-2009.

[2] U. S. Environmental Protection Agency, Office of Water. "Report to Congress-Impacts and Control of CSOs and SSOs", EPA 833-R-04-001, August 2004, Washington, DC.
[3] Wisconsin Dept. of Natural Resources. "Sewer Overflows in Wisconsin-A Report to the Natural Resources Board", March 15, 2001.

- Sanitary Sewer Overflows and Sewer System Maintenance. United States Environmental Protection Agency, Office of Water, EPA-832-R-98-002, December 1998.

- Prevention and Control of Sewer System Overflows. WEF Manual of Practice No. FD-17, 3rd edition. Water Environment Federation, Washington, DC. 2011.

- Sanitary Sewer Overflow Solutions Guidance Manual. Prepared By Black & Veatch Corporation for American Society of Civil Engineers Under Cooperative Agreement With U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, DC (EPA Cooperative Agreement #CP-828955-01-0) April, 2004.

- Protocols for Identifying Sanitary Sewer Overflows. Prepared by Black & Veatch Corporation for
- American Society of Civil Engineers Under Cooperative Agreement with U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, DC (EPA Cooperative Agreement #CX 826097-01-0) June 2000.

- Optimizing Operation, Maintenance, and Rehabilitation of Sanitary Sewer Collection Systems. New England Interstate Water Pollution Control Commission, Lowell, MA, December 2003.

- Optimization of Collection System Maintenance Frequencies and System Performance. Prepared by Black & Veatch, LLP for American Society of Civil Engineers Under Cooperative Agreement with U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, DC (EPA Cooperative Agreement #CX 824902-01-0) February, 1999.

- White Paper on Condition Assessment of Wastewater Collection Systems. U. S. Environmental Protection Agency, Office of Research and Development, Washington, DC, EPA/600/R-09/049, May 2009.

- State of Technology Review Report on Rehabilitation of Wastewater Collection and Water Distribution Systems. Dr. Ray Sterling, Lili Wang, Robert Morrison (Contract No. EP-C-05-057 Task Order No. 58). U.S. Environmental Protection Agency, Office of Research and Development, Cincinnati, OH, March 2009.

- Guide to Managing Peak Wet Weather Flows in Municipal Wastewater Collection and Treatment Systems. Water Environment Federation, Alexandria, VA, 2006.

- Core Attributes of Effectively Managed Wastewater Collection Systems. American Public Works Association, American Society of Civil Engineers, National Association of Clean Water Agencies, Water Environment Federation, July 2010 (contains extensive list of references).

- Private Property Virtual Library (PPVL) Information *For* Utilities *From* Utilities. (http://wef.org/PrivateProperty/). Contains a library of case studies from private property-related programs at wastewater utilities.

Current state rules and federal regulations are not clear concerning the discharge of untreated or partially treated sewage from sewerage systems. The primary reason for these rule revisions is to assure consistency and certainty in permit requirements and to address the causes of SSOs and CSOs in Wisconsin. While the rules require that permits prohibit the discharge of untreated or partially treated sewage, they also recognize and require "common sense" activities that permittees should use to protect

the large monetary investment they have in their sewerage systems and to avoid permit noncompliance. The CMOM program is a proactive approach to assuring the long term integrity of these systems.

9. Analysis and supporting documentation used to determine effect on small business or in preparation of an economic impact analysis:

Implementation of this rule will primarily occur through actions of municipal and privately operated sewage collection system owners. As stated above, most of the rule changes provide more clarity in the definition of terms such as bypasses, blending and controlled diversions. The rules establish conditions for circumstances when bypasses may be approved, and clarifies that the bypass prohibition applies to both public and privately owned sewerage systems and to industrial wastewater systems, as required under federal law. The primary change contained in the rule package is that it establishes the additional regulatory requirement that permittees develop a CMOM program, as well as the requirement to conduct a SECAP for systems with compliance problems.

Because of the small number of privately-owned sewage collection systems in the state, the direct statewide economic impact of this rule on these small businesses will be low. Costs to these private businesses to develop a CMOM will be minimal due to the relatively small size of these types of sewage collection systems. Individual private owners may experience significant costs if the collection system has not been constructed or maintained in a manner to prevent overflows and a SSO occurs. In these cases, the owner will eventually need to upgrade the private collection system. In addition, small businesses that are connected to a municipal sewage collection system may experience costs associated with collection system improvements by municipalities through their user fees and other local taxing authorities for sewage collection system maintenance and improvements. It is difficult to determine the statewide or individual system effect of small business due to the variability in requirements that may occur in each municipality.

10. Effect on small business:

The only new direct cost of these rules is associated with the preparation of the CMOM by private sewage collection system owners and by municipalities that have not yet developed such a program. The effect of this rule on other small businesses will be indirectly through the actions of municipal sewage collection system owners. Costs for sewage collection system maintenance and improvements are normally assessed to all users of the system, including small business owners. Such costs are determined at the local level. Because the costs to any given system owner will likely be assessed to all system users, the cost to an individual small business owner for this activity will be low.

In some instances, it may be determined through activities identified in the CMOM program that excessive I/I originates from a building sewer. If the building sewer from a small business is identified as a source of excessive I/I, the municipality may require rehabilitation of the building sewer by the property owner. Under the "proper operation and maintenance" provisions of state statutes and rules, sewage collection system maintenance activities that may be identified through the CMOM process are existing requirements and, therefore, are not specific new provisions established by these rules.

In the case of private ownership of a sewerage system (e.g., a mobile home park) identified as a source of SSO, replacement or repair of sewerage system components would be the responsibility of the owner. The number of these cases is likely to be very limited because of the small number of private sewage collection system permittees and, therefore, the statewide cost will be low.

Pursuant to ss. 283.90 and 283.91, Wis. Stats., violations of permit conditions to rule requirements may be referred to the Department of Justice for enforcement. Specific enforcement responses for violations

of the SSO prohibition will depend on the individual circumstances associated with each event. Section NR 210.21 includes factors the Department will consider in an enforcement response to a SSO or an overflow at a sewage treatment facility. While it will be necessary to force action in some instances through aggressive enforcement responses (i.e., referral to the Department of Justice pursuant to ch. 283, Wis. Stats.), the intent of these rules is to improve the overall management of our sewerage system infrastructure and avoid violations. In all cases, proactive implementation of CMOM program activities will mitigate the potentially more costly effects of sewage collection system failures later.

11. A copy of any comments and opinion prepared by the Board of Veterans Affairs under s. 45.03 (2m), Stats., for rules proposed by the Department of Veterans Affairs:

Not Applicable.

11. Agency contact:

Duane Schuettpelz
Bureau of Water Quality.
P.O. Box 7921
101 South Webster Street
Madison, WI 53707
duane.schuettpelz@wisconsin.gov

SECTION 1. NR 110.03 (6m) is renumbered NR 110.03 (6e).

SECTION 2. NR 110.03 (6m) and (6s) are created to read:

NR 110.03 (6m) "Blending" has the meaning specified under s. NR 210.03 (2e).

Note: Subsection NR 210.03 (2e) reads: "Blending" means the routing of untreated or partially treated wastewater around a biological treatment process, or a portion of a biological treatment process, within a sewage treatment facility. The routing of untreated or partially treated wastewater around a portion of a biological treatment process is considered to be blending only if the entire wastewater flow has not received biological treatment.

(6s) "Building sewer" means that part of the drain system not within or under a building which conveys its discharge to a public sewer, private interceptor main sewer, private onsite wastewater treatment system or other point of discharge or dispersal.

Note: This is the same definition as contained in s. SPS 381.01 (44). A building sewer may also be referred to as a building lateral.

SECTION 3. NR 110.03 (7) is repealed and recreated to read:

NR 110.03 (7) "Bypass" has the meaning specified in s. NR 205.03 (5).

Note: Subsection NR 205.03 (5) reads: "Bypass" means the intentional diversion of waste streams from any portion of a sewage treatment facility or a wastewater treatment facility. A bypass does not include a building back-up or a combined sewer overflow.

SECTION 4. NR 110.03 (7e), (7m) and (7s) are created to read:

NR 110.03 (7e) "Combined sewer overflow" has the meaning specified under s. NR 210.03 (3h):

Note: Subsection NR 210.03 (3h) reads: "Combined sewer overflow" means a release of wastewater from a combined sewer system directly into a water of the state or to the land surface.

NR 110.03 (7m) "Combined sewer system" has the meaning specified under s. NR 210.03 (3p).

Note: Subsection NR 210.03 (3p) reads: "Combined sewer system" means a wastewater collection system owned by a municipality that conveys domestic, commercial and industrial wastewater and storm water runoff through a single pipe system to a publicly owned treatment works.

NR 110.03 (7s) "Combined sewer treatment facility" means all the structures, pipes and other equipment that constitute the various treatment processes and treatment units employed to reduce pollutants in wastewater from combined sewer systems.

SECTION 5. NR 110.03 (8) is repealed.

SECTION 6. NR 110.03 (9) is repealed and recreated to read:

NR 110.03 (9) "Controlled diversion" has the meaning specified under s. NR 205.03 (9m).

Note: Subsection NR 205.03 (9m) and Note reads: "Controlled diversion" means the routing of untreated or partially treated wastewater around any treatment unit within a sewage or wastewater treatment facility which is then recombined with undiverted wastewater prior to the effluent sampling location and prior to effluent discharge.

Note: Controlled diversions at a sewage treatment facility do not include blending and may occur only in compliance with s. NR 205.07 (1) (v).

SECTION 7. NR 110.03 (10) is repealed.

SECTION 8. NR 110.03 (17) is amended to read:

NR 110.03 (17) "Inflow" means water other than wastewater that enters a sewerage system (including sewer service connections) from sources such as roof leaders, cellar drains, yard drains, area drains, foundation drains, <u>sump pumps,</u> drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.

SECTION 9. NR 110.03 (26m), (27e), (27m) and (27s) are created to read:

NR 110.03 (26m) "Private interceptor main sewer" means a sewer serving two or more buildings and not part of the municipal sewer system.

Note: This is the same definition as contained in s. SPS 381.01 (193).

(27e) "Sanitary sewer overflow" has the meaning specified under s. NR 210.03 (10).

Note: Subsection NR 210.03 (10) reads: "Sanitary sewer overflow" means a release of wastewater from a sewage collection system or an interceptor sewer directly into a water of the state or to the land surface.

(27m) "Sanitary sewer overflow structure" means the physical structure, hydraulic mechanisms and piping specifically constructed to convey a sanitary sewer overflow.

(27s) "Satellite sewage collection system" has the meaning specified under s. NR 205.03 (31r).

Note: Subsection NR 205.03 (31r) reads: "Satellite sewage collection system" means a municipally owned or a privately owned sewage collection system that conveys wastewater to another satellite sewage collection system or to another sewerage system that provides wastewater treatment and discharges under a separate WPDES permit.

SECTION 10. NR 110.03 (28) is amended to read:

NR 110.03 (28) "Sewage collection system" means the common sanitary sewers, interceptor sewers and appurtenant equipment, such as lift stations, within a sewerage system which are primarily installed to receive wastewaters directly from facilities which convey wastewater from individual structures or from private property, and which include service connection "Y" fittings designed for connection with those facilities. The facilities which convey wastewater from individual structures, such as building sewers and private interceptor sewers, from private property to the public sanitary sewer, or its equivalent, are specifically excluded from the definition of "~~sewerage~~ sewage collection system"; except that pumping units and pressurized lines for individual structures or groups of structures ~~may be~~are included as part of a "sewage collection system" when such units are cost effective and are owned and maintained by the sewerage system owner.

SECTION 11. NR 110.03 (29) is repealed and recreated to read:

NR 110.03 (29) "Sewage treatment facility" means all the structures, pipes and other equipment that constitute the various treatment processes and treatment units employed to reduce pollutants in sewage.

SECTION 12. NR 110.03 (29d), (29h), and (30p) are created to read:

NR 110.03 (29d) "Sewage treatment facility overflow" has the meaning specified under s. NR 210.03 (13).

Note: Subsection NR 210.03 (13) reads: **"**Sewage treatment facility overflow" means a release of wastewater from a location within a sewage treatment facility, other than permitted effluent outfall structures, directly to a water of the state or to the land surface. A sewage treatment facility overflow does not include blending, controlled diversions or discharges from permitted combined sewage treatment facility effluent outfall structures.

(29h) "Sewage treatment facility overflow structure" means the physical structure, hydraulic mechanisms and piping specifically constructed to convey a sewage treatment facility overflow.

(30p) "Sewer extension" means installation of a sewer or interceptor sewer, or extension thereof, to provide additional conveyance capacity and service to development within the existing or proposed tributary area of the extension. Alterations or modifications of existing sewerage systems designed to replace inadequate existing structures or installed because of inadequate hydraulic sewer capacity and that do not extend sanitary sewer service to areas previously not served are not sewer extensions.

SECTION 13. NR 110.03 (31) is renumbered NR 110.03 (29t).

SECTION 14. NR110.03 (32g) and (32r) are created to read:

NR 110.03 (32g) "Treatment process" means a physical, biological or chemical action that is applied to wastewater to remove or reduce pollutants. A treatment process may consist of multiple

individual treatment units. "Treatment process" includes screening, chemical treatment, sedimentation, biological treatment, filtration, disinfection and sludge digestion.

NR 110.03 (32r) "Treatment unit" means individual structures or equipment within a sewage or wastewater treatment facility that are part of a treatment process. Typical treatment units are screens, clarifiers, aeration tanks, filters, digesters and lagoons.

SECTION 15. NR 110.05 (2) is repealed.

SECTION 16. NR 110.05 (3) and (4) are amended to read:

NR 110.05 (3) PERMISSIVE APPROVALS ~~OF SEWER EXTENSION APPLICATIONS~~ RELATED TO PERMITTED EFFLUENT LIMITATIONS. (a) Unless an approval would be contrary to the purpose of this section, applications for sanitary sewer extensions that comply with all applicable requirements of this chapter shall be approved if the sewer will be tributary to~~:~~

~~1. A sewerage system which experiences no category 1 bypasses and overflows and~~

~~2. A~~a sewage treatment ~~plant~~ facility ~~which discharges an effluent~~ in compliance with the monthly average effluent limitations for biochemical oxygen demand (BOD) and total suspended solids contained in ~~ch. NR 210 or 214, or with any more stringent water quality related effluent limitations required to achieve applicable water quality standards derived from chs. NR 102 to 104, or from any federal water quality standard promulgated pursuant to section 303 of P.L. 95-217 for any waters of the state~~ its WPDES permit.

(b) In the event that the WPDES permit for a sewage treatment ~~plant~~ facility currently discharging an effluent in accordance with ch. NR 210 establishes a compliance schedule for achievement of any more stringent water quality related effluent limitations for biochemical oxygen demand and total suspended solids applicable to such treatment ~~plant~~ facility, compliance with the schedule of compliance in the discharge permit will be deemed to be compliance with the applicable water quality related effluent limitations.

(c) In determining whether a discharged effluent is in compliance with the monthly average effluent limitations for biochemical oxygen demand (BOD) and total suspended solids contained in ~~ch. NR 210 or 214, or with any more stringent water quality related effluent limitations required to achieve applicable water quality standards~~ a WPDES permit, the following procedure shall apply:

1. Compliance shall be determined by ~~staff~~ department review of the previous 12 months of discharge monitoring data. If 12 months of data are not available, the review shall be based on the data that are available.

2. More than a total of 3 months of violations of the monthly average limitations for either BOD or total suspended solids or both in the previous 12 months (or the equivalent ratio for the number of months of data available) shall cause denial, subject to the following additional considerations:

a. Recognition of the inherent inaccuracy of the BOD and total suspended solids tests shall be given by multiplying the monthly average effluent limitations as specified in the permit by a factor of 1.3 for BOD and 1.2 for total suspended solids for purposes of determining whether monthly average effluent results are in compliance.

b. The department may grant approval if it determines that, due to a demonstrable action by the

permittee, the ~~plant~~ sewage treatment facility has been in compliance for ~~4~~ four or more consecutive months, thus demonstrating a trend toward better operation.

c. The department may grant approval in those instances where the permittee demonstrates that noncompliance with the effluent limitations has been caused by algae growth in a sewage treatment facility utilizing lagoons as the principal treatment ~~device~~ process.

d. The department may grant approval if it determines that noncompliance with the effluent limitations has been caused by operating difficulties associated with ~~plant~~ startup for those sewage treatment facilities which have recently been constructed or undergone major modification or expansion. The period described as ~~plant~~ startup may be no longer than 12 consecutive months.

(4) DENIAL ~~OF SEWER EXTENSION APPLICATIONS~~ RELATED TO PERMITTED EFFLUENT LIMITATIONS. (a) ~~Applications~~ Taking into account the factors in subs. (3) (c), applications for sanitary sewer extensions shall be denied if the sewer will be tributary to ~~any of the following: 1. A~~ a sewage treatment ~~plant~~ facility ~~which discharges an effluent~~ not in compliance with the monthly average effluent limitations for biochemical oxygen demand (BOD_5) and total suspended solids contained in ~~ch. NR 210 or 214~~ NR 206, ~~or with any more stringent water quality related effluent limitations required to achieve applicable water quality standards derived from chs. NR 102 to 104 or from any federal water quality standard promulgated pursuant to 33 USC 1313 for any waters of the state~~ its WPDES permit.

~~2. A sewerage system in which any category 1 bypasses or overflows occur.~~

(b) If the WPDES permit for a sewage treatment ~~plant~~ facility ~~currently discharging an effluent in accordance with ch. NR 210~~ establishes a compliance schedule for achievement of any more stringent water quality related effluent limitations for biochemical oxygen demand and total suspended solids applicable to such treatment plant, compliance with the schedule of compliance in the discharge permit shall be deemed to be compliance with the applicable water quality related effluent limitations.

SECTION 17. NR 110.05 (5) (c) is repealed.

SECTION 18. NR 110.05 (7) is repealed.

SECTION 19. NR 110.09 (11) (note) is created to read:

Note: Facilities plans for projects subject to the requirements of this section may include results from a system evaluation and capacity assurance plan under s. NR 110.10 (4).

SECTION 20. NR 110.10 (1) (h) is repealed and recreated to read:

NR 110.10 (1) (h) *Downstream overflows*. A description of the number and location of sanitary sewer overflow structures and a description of the occurrence of sanitary sewer overflow events at any location within the sewerage system.

SECTION 21. NR 110.10 (4) is created to read:

NR 110.10 (4) SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN. A system evaluation and capacity assurance plan shall include all the following:

(a) An evaluation of those portions of the sewage collection system that may contribute to sewage treatment facility overflows or other noncompliance at a sewage treatment facility, or that are

experiencing or contributing to a sanitary sewer overflow caused by excessive infiltration and inflow or a system hydraulic deficiency. The evaluation must provide estimates of peak flows, including the amount from sanitary sewer overflows and sewage treatment facility overflows, provide estimates of the capacity of key system components, identify hydraulic deficiencies, and identify the sources (including private property sources) of infiltration and inflow that contribute to the peak flows associated with sanitary sewer overflow or sewage treatment facility overflow occurrences.

(b) An analysis to identify actions that will eliminate sanitary sewer overflows and sewage treatment facility overflows or abate their occurrence and effects on public health and the environment to the extent technically and economically feasible. The analysis shall consider alternatives such as providing improved operation and maintenance, infiltration and inflow reduction and removal from all sources, wastewater equalization or storage facilities, sewer and lift station replacement or rehabilitation, the treatment of overflows, peak flow treatment schemes at sewage treatment facilities, expansion of sewage treatment facility capacity and any other construction of new or modified sewerage system components.

Note: When evaluating feasibility of alternatives, the department may consider factors such as technical achievability, the relationship between the control of storm water and the control of infiltration/inflow into the sewage collection system, costs and affordability of implementation and risks to public health, the environment and welfare of the community served by the sewage collection system.

(c) Identification of specific short and long term corrective actions. Schedules for implementation shall be established giving greatest priority to those actions that will protect public health and minimize environmental risk. The department may establish compliance schedules in WPDES permits to implement specific actions identified under this paragraph.

Note: Portions of a system evaluation and capacity analysis plan may include results from an infiltration/inflow analysis or a sewer system evaluation survey under s. NR 110.09 (5) or s. NR 110.09 (6), respectively.

SECTION 22. NR 110.11 (1) (d) 5. is amended to read:

NR 110.11 (1) (d) 5. Infiltration and inflow;

SECTION 23. NR 110.11 (1) (note) is created to read:

Note: Facilities plans for sewage lift stations may include results from a system evaluation and capacity assurance plan under s. NR 110.10 (4).

SECTION 24. NR 110.13 (6) is created to read:

NR 110.13 (6) SANITARY SEWER OVERFLOW STRUCTURES. Sanitary sewer overflows structures may be provided as measures to manage and mitigate the effects of sanitary sewer overflow discharges that may occur under extreme conditions. Sanitary sewer overflow structures shall be designed in accordance with all the following requirements:

(a) The overflow may be activated either manually or automatically. If automatically activated, a monitoring system shall be provided to detect the initiation time of the overflow and to provide an alarm signal to the sewage collection system operator or other responsible authority.

(b) The overflow structure shall be designed to discharge only those wastewater flows greater than the peak flow conveyance capacity within the sewage collection system.

(c) Equipment shall be provided to measure the flow and, if practicable, sample the wastewater discharged from the structure.

Note: A department approval of a sanitary sewer overflow structure does not eliminate or alleviate the requirement that prohibits sewage treatment facility overflows in s. NR 210.21.

SECTION 25. NR 110.15 (2) (c), (d) and (e) are repealed.

SECTION 26. NR 110.15 (5) (d) is repealed and recreated to read:

NR 110.15 (5) (d) *Emergency operation.* At least one of the following shall be provided to ensure continued operation of the sewage treatment facility in accordance with s. NR 210.08:

1. 'Emergency power generator.' An emergency power generator with sufficient generating capacity to meet the sewage treatment facility power demands to comply with s. NR 210.08.

2. 'Two independent electrical transmission sources.' An electrical system connected to two independent transmission routes that receive power from the same electrical grid network which supplies power to the sewage treatment facility service area.

3. 'Holding facilities.' Holding facilities that have a capacity to detain the maximum day design flow for a maximum period of 24 hours.

SECTION 27. NR 110.15 (5) (g) is amended to read:

NR 110.15 (5) (g) ~~*Unit bypasses.*~~*Controlled diversion structures and equipment*. ~~Unit bypasses~~ Structures and equipment to enable controlled diversions shall be located and arranged to allow for proper maintenance of the sewage treatment facility~~ while complying with the provisions of sub. (2)(c)~~. In all cases, it must be possible for each treatment unit to be independently removed from service.

Note: Section NR 205.07 (1) (u) 2. contains specific provisions associated with the use of controlled diversion structures and equipment and requires compliance with all permit effluent limitations during times of controlled diversion.

SECTION 28. NR 110.15 (5) (h) is repealed and recreated to read:

NR 110.15 (5) (h) *Sewage treatment facility overflow structures*. Sewage treatment facility overflow structures may be provided at an owner's discretion as a measure to protect sewage treatment facility integrity and treatment efficiency during severe operating conditions. Sewage treatment facility overflow structures may not be installed at the headworks of aerated or stabilization pond treatment systems. Sewage treatment facility overflow structures shall be designed in accordance with all the following requirements:

1. The overflow may be activated by either manual or automatic means. If automatically activated, a monitoring system shall be provided to detect the initiation time of the overflow and to provide an alarm signal to the sewage treatment facility operator or other responsible authority.

2. The structure shall be designed to discharge only those wastewater flows above the peak flow rate that the sewage treatment facility can safely process without threatening loss of life, causing severe

property damage or compromising treatment processes, including the washout of biological media in the biological treatment process.

3. Equipment shall be provided to measure the flow and sample the wastewater that is discharged from the structure.

Note: A department approval of a sewage treatment facility overflow structure does not eliminate or alleviate the requirement that prohibits sewage treatment facility overflows in s. NR 210.21.

SECTION 29. NR 110.22 (5) (b) 2. and (c) 1. are amended to read:

NR 110.22 (5) (b) 2. Multiple filters shall be provided ~~to insure compliance with s. NR 110.15(2)(c)~~.

(5) (c) 1. Multiple screening units shall be provided ~~to insure compliance with NR 110.15 (2) (c)~~.

SECTION 30. NR 205.03 (3m) is created to read:

NR 205.03 (3m) "Blending" has the meaning specified under s. NR 210.03 (2e).

Note: Subsection NR 210.03 (2e) reads: "Blending" means the routing of untreated or partially treated wastewater around a biological treatment process, or a portion of a biological treatment process, within a sewage treatment facility. The routing of untreated or partially treated wastewater around a portion of a biological treatment process is considered to be blending only if the entire wastewater flow has not received biological treatment.

SECTION 31. NR 205.03 (4m) is created to read:

NR 205.03 (4m) "Building backup" has the meaning specified under s. NR 210.03 (2m).

Note: Subsection NR 210.03 (2m) reads: "Building backup" means an accumulation of sewage in any public or private building caused by blockage, failure or other hydraulic constraint in the sewage collection system or by blockage or failure of the building sewer or private interceptor main sewer.

SECTION 32. NR 205.03 (5) is amended to read:

NR 205.03 (5) "Bypass" means the intentional diversion of waste streams from any portion of ~~the treatment works~~ a sewage treatment facility or a wastewater treatment facility. A bypass does not include a building back-up or a combined sewer overflow.

SECTION 33. NR 205.03 (6e), (6m) and (6s) are created to read:

NR 205.03 (6e) "Combined sewer overflow" has the meaning specified under s. NR 210.03 (3h):

Note: Subsection NR 210.03 (3h) reads: "Combined sewer overflow" means a release of wastewater from a combined sewer system directly into a water of the state or to the land surface.

(6m) "Combined sewer system" has the meaning specified under s. NR 210.03 (3p):

Note: Subsection NR 210.03 (3p) reads: "Combined sewer system" means a wastewater collection system owned by a municipality that conveys domestic, commercial and industrial wastewater and storm water runoff through a single pipe system to a publicly owned treatment works.

(6s) "Combined sewer treatment facility" has the meaning specified under s. NR 110.03 (7s):

Note: Subsection NR 110.03 (7s) reads: "Combined sewer treatment facility" means all the structures, pipes and other equipment that constitute the various treatment processes and treatment units employed to reduce pollutants in wastewater from combined sewer systems.

SECTION 34. NR 205.03 (9m) is created to read:

NR 205.03 (9m) "Controlled diversion" means the routing of untreated or partially treated wastewater around any treatment unit within a sewage or wastewater treatment facility which is then recombined with undiverted wastewater prior to the effluent sampling location and prior to effluent discharge.

Note: Controlled diversions at a sewage treatment facility do not include blending and may occur only in compliance with s. NR 205.07 (1) (v).

SECTION 35. NR 205.03 (31g), (31r), (35e), (35m), (35s), (39g), (39r) and (43m) are created to read:

NR 205.03 (31g) "Sanitary sewer overflow" has the meaning specified under s. NR 210.03 (10).

Note: Subsection NR 210.03 (10) reads: "Sanitary sewer overflow" means a release of wastewater from a sewage collection system or an interceptor sewer directly into a water of the state or to the land surface.

(31r) "Satellite sewage collection system" means a municipally owned or a privately owned sewage collection system that conveys wastewater to another satellite sewage collection system or to another sewerage system that provides wastewater treatment and discharges under a separate WPDES permit.

(35e) "Sewage treatment facility" has the meaning specified under s. NR 110.03 (29).

Note: Subsection NR 110.03 (29) reads: "Sewage treatment facility" means all the structures, pipes and other equipment that constitute the various treatment processes and treatment units employed to reduce pollutants in sewage.

(35m) "Sewage treatment facility overflow" has the meaning specified under s. NR 210.03 (13).

Note: Subsection NR 210.03 (13) **"**Sewage treatment facility overflow" means a release of wastewater from a location within a sewage treatment facility, other than permitted effluent outfall structures, directly to a water of the state or to the land surface. A sewage treatment facility overflow does not include blending, controlled diversions or discharges from permitted combined sewage treatment facility effluent outfall structures.

(35s) "Sewerage System" has the meaning specified under s. NR 110.03 (30).

Note: Subsection NR 110.03 (30) reads: "Sewerage system" means all structures, conduits and pipes, by which sewage is collected, treated, and disposed of, except plumbing inside and in connection with buildings served, and service pipes, from building to street main.

(39g) "Treatment process" has the meaning specified under s. NR 110.03 (32g).

Note: Subsection NR 110.03 (32g) "Treatment process" means a physical, biological or chemical action that is applied to wastewater to remove or reduce pollutants. A treatment process may consist of multiple individual

treatment units. "Treatment process" includes screening, chemical treatment, sedimentation, biological treatment, filtration, disinfection and sludge digestion.

(39r) "Treatment unit" has the meaning specified under s. NR 110.03 (32r).

Note: Subsection NR 110.03 (32r) reads: "Treatment unit" means individual structures or equipment within a sewage or wastewater treatment facility that are part of a treatment process. Typical treatment units are screens, clarifiers, aeration tanks, filters, digesters and lagoons.

(43m) "Wastewater treatment facility" means all the structures, pipes and other equipment that constitute the various treatment processes and treatment units employed to reduce pollutants in wastewater.

SECTION 36. NR 205.07 (1) (s) (title), 1., 2.a., 3 and 4. are amended to read:

NR 205.07 (1) (s) *Noncompliance ~~– 24 hour reporting~~and other reporting.*1. ~~The permittee~~Sanitary sewer overflows and sewage treatment facility overflows shall be reported in accordance with s. NR 210.21 (4). Permittees shall report ~~any~~ all other noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within ~~5~~ five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2. The following are examples of noncompliance incidents that shall be reported within 24 hours in accordance with the requirements in subd. 1.:

a. ~~Any unanticipated~~Except for a scheduled bypass approved pursuant to s. NR 205.07 (1) (u) 2., any bypass which exceeds any effluent limitation in the permit.

3. The department may waive the written report requirement on a case-by-case basis for reports specified in subd. ~~2~~1. if the oral report has been received within 24 hours.

4. The permittee shall report ~~all~~ other instances of noncompliance not reported under ~~par. (r) or subds 1. To 3.~~ subd. 1. at the time discharge monitoring reports are submitted either on the report itself or as an attachment to the report. The reports shall contain the information specified in ~~subds. 1. to 3.~~ subd. 1. and shall be submitted to the department at the intervals specified in the permit.

SECTION 37. NR 205.07 (1) (u) is created to read:

NR 205.07 (1) (u) *Bypassing.* Except for a controlled diversion as provided in par. (v), any bypass is prohibited. The Department may approve the following:

1. 'Blending.' The bypass event is blending at a sewage treatment facility and complies with the requirements of s. NR 210.12.

2. 'Scheduled bypass.' The bypass event is scheduled or anticipated in advance by the permittee and the permittee received prior written approval from the department for the scheduled bypass. A permittee's written request for department approval of a scheduled bypass shall demonstrate that the

conditions in subd. 3 are met and include the proposed date and reason for the bypass, estimated volume and duration of the bypass, alternatives to bypassing and measures to mitigate environmental harm caused by the bypass. The department may require the permittee to provide public notification for a scheduled bypass if it is determined there is significant public interest in the proposed action.

Note: If the department determines there is significant public interest in the proposed action, the department may schedule a public hearing or notice regarding the proposal for a scheduled bypass.

3. 'Other bypass.' The permittee demonstrates that all of the following apply:

a. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance.

Note: When evaluating feasibility of alternatives, the department may consider factors such as technical achievability, costs and affordability of implementation and risks to public health, the environment and, where the permittee is a municipality, the welfare of the community served.

c. The bypass was reported in accordance with par. (s) or the permittee reported in accordance with s. NR 210.21 (4).

Note: Pursuant to ss. 283.89 and 283.91, Stats., violations of permit conditions or rule requirements are referred to the department of justice for enforcement.

SECTION 38. NR 205.07 (1) (v) is repealed and recreated to read:

NR 205.07 (1) (v) *Controlled diversion.* Controlled diversions are allowed provided the following requirements are met:

1. Effluent from the sewage treatment facility or wastewater treatment facility shall meet the effluent limitations established in the permit. Wastewater that is diverted around a treatment unit or treatment process during a controlled diversion shall be recombined with wastewater that is not diverted prior to the effluent sampling location and prior to effluent discharge.

2. A controlled diversion may not occur during periods of excessive flow or other abnormal wastewater characteristics.

3. A controlled diversion may occur only when necessary for essential maintenance to assure efficient operation.

Note: Sewage treatment facilities that have multiple treatment units to treat variable or seasonal loading conditions may shut down redundant treatment units when necessary for efficient operation.

4. A controlled diversion may not result in a sewage treatment facility or wastewater treatment facility overflow.

5. All instances of controlled diversions shall be documented in sewage treatment facility or wastewater treatment facility records and such records shall be available to the department on request.

SECTION 39. NR 205.07 (2) (d) is repealed.

SECTION 40. NR 205.08 (1) (b) 5. (note) is created to read:

Note: Section NR 210.20 requires permit authorization for all satellite sewage collection systems.

SECTION 41. NR 208.03 (1m) is created to read:

NR 208.03 (1m) "CMOM" has the meaning specified under NR 210.03 (3d).

Note: Subsection NR 210.03 (3d) reads: "CMOM" means a capacity, management, operation and maintenance program under s. NR 210.23.

SECTION 42. NR 208.05 (3) (m) is repealed and recreated to read:

NR 208.05 (3) (m) S*ewage collection systems.* 1. Point assignments shall be as follows:

Criteria	Points
After the effective date specified in s. NR 210.23 (2), did not have a CMOM program that meets the requirements of s. NR 210.23.**OR** Prior to the effective date specified in s. NR 210.23(2), did not have a documented operation and maintenance or CMOM program.	30

2. Owners of sewage collection systems shall record and maintain information about the operation and maintenance of their sewage collection system, which may include the following: cleaning, root removal, flow monitoring, smoke testing, sewer line televising, manhole inspections, lift station servicing, manhole rehabilitation, mainline rehabilitation, private sewer inspections, private sewer infiltration/inflow (I/I) removal, precipitation, sanitary sewer overflows, building or basement backups, lift station failures, sewer pipe failures, complaints and any other collection system information deemed important by the owner.

Note: Sanitary sewer overflow occurrences and sewage treatment facility overflow occurrences are reported under s. NR 210.21 (4). Additional reporting requirements under this chapter are required under s. NR 208.06 (1) (b). The department may initiate enforcement action under s. 283.89, Stats., for any sanitary sewer overflow or sewage treatment facility overflow.

SECTION 43. NR 208.06 (1) is amended to read:

NR 208.06 (1) OWNER REVIEW. (a) The owner of the wastewater treatment works shall review and complete all applicable CMAR sections. The owner submitting a CMAR under this chapter shall provide a response for individual CMAR sections when required pursuant to table 1 and this section.

(b) Sanitary sewer collection system owners shall review the total number of sanitary sewer overflow occurrences and sewage treatment facility overflow occurrences for the year as reported under s.

NR 210.21 (4) and, if overflows are reported, provide a response of actions taken or underway to reduce or eliminate such occurrences in the future.

SECTION 44. NR 210 Subchapter I (title) to precede NR 210.01 is created to read:

SUBCHAPTER I - GENERAL

SECTION 45. NR 210.01 is amended to read:

NR 210.01 Purpose. The purpose of this chapter is to establish effluent limitations, performance requirements and monitoring provisions to be used in permits for discharges from publicly owned treatment works and privately owned domestic sewage treatment works. ~~under s. 283.13 (4) and (5) and 283.55 (1) Stats.~~

SECTION 46. NR 210.02 is repealed and recreated to read:

NR 210.02 Applicability. This chapter applies to all publicly owned treatment works and privately owned domestic sewage treatment works.

SECTION 47. NR 210.03 (intro.) is amended to read:

NR 210.03 Definitions. The definitions of terms and meanings of abbreviations used in this chapter are set forth in ~~s. 283.62~~ s. 283.01, Stats., chs. NR 205 and NR 218 and as follows:

SECTION 48. NR 210.03 (2e), (2m), and (2s) are created to read:

NR 210.03 (2e) "Blending" means the routing of untreated or partially treated wastewater around a biological treatment process, or a portion of a biological treatment process, within a sewage treatment facility. The routing of untreated or partially treated wastewater around a portion of a biological treatment process is considered to be blending only if the entire wastewater flow has not received biological treatment.

(2m) "Building backup" means an accumulation of sewage in any public or private building caused by blockage, failure or other hydraulic constraint in the sewage collection system or by blockage or failure of the building sewer or private interceptor main sewer.

Note: The discharge from a building sewer or private interceptor main sewer directly to a water of the state may be a sanitary sewer overflow and may be subject to the WPDES permit requirements of ch. 283, Stats.

(2s) "Building sewer" has the meaning specified under s. NR 110.03 (6s).

Note: Subsection NR 110.03 (6s) reads: "Building sewer" means that part of the drain system not within or under a building which conveys its discharge to a public sewer, private interceptor main sewer, private onsite wastewater treatment system or other point of discharge or dispersal.

SECTION 49. NR 210.03 (3d), (3h), (3p), (3t), (6e), (6m), (6s) and (8m) are created to read:

NR 210.03 (3d) "CMOM" means a capacity, management, operation and maintenance program under s. NR 210.23.

(3h) "Combined sewer overflow" means a release of wastewater from a combined sewer system directly into a water of the state or to the land surface.

(3p) "Combined sewer system" means a wastewater collection system owned by a municipality that conveys domestic, commercial and industrial wastewater and storm water runoff through a single pipe system to a publicly owned treatment works.

(3t) "Combined sewer treatment facility" has the meaning specified under s. NR 110.03 (7s):

Note: Subsection NR 110.03 (7s) reads: "Combined sewer treatment facility" means all the structures, pipes and other equipment that constitute the various treatment processes and treatment units employed to reduce pollutants in wastewater from combined sewer systems.

(6e) "Hydraulic constraint" means the structural collapse of a sewer, an accumulation of material in a sewer or an insufficiently-sized sewer such that sewage flow is impeded or stopped from flowing downstream.

(6m) "Infiltration" has the meaning specified under s. NR 110.03 (16).

Note: Subsection NR 110.03 (16) reads: "Infiltration" means water other than wastewater that enters a sewerage system (including sewer service connections) from the ground through such sources as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.

(6s) "Inflow" has the meaning specified under s. NR 110.03 (17).

Note: Subsection NR 110.03 (17) reads: "Inflow" means water other than wastewater that enters a sewerage system (including sewer service connections) from sources such as roof leaders, cellar drains, yard drains, area drains, foundation drains, sump pumps, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.

(8m) "Private interceptor main sewer" has the meaning specified under s. NR 110.03 (26m).

Note: Subsection NR 110.03 (26m) reads: "Private interceptor main sewer" means a sewer serving two or more buildings and not part of the municipal sewer system.

SECTION 50. NR 210.03 (9m) is renumbered NR 210.03 (12) and is amended to read:

NR 210.03 (12) "Sewage treatment ~~facilities~~facility" has the meaning specified under s. NR 110.03 (29).

Note: Subsection NR 110.03 (29) reads: "Sewage treatment facility" means all the structures, pipes and other equipment that constitute the various treatment processes and treatment units employed to reduce pollutants in sewage.

SECTION 51. NR 210.03 (10) is renumbered NR 210.03 (16).

SECTION 52. NR 210.03 (10) and (11) are created to read:

NR 210.03 (10) "Sanitary sewer overflow" means a release of wastewater from a sewage collection system or an interceptor sewer directly into a water of the state or to the land surface.

NR 210.03 (11) "Sewage collection system" has the meaning specified under s. NR 110.03 (28).

Note: Subsection NR 110.03 (28) reads: "Sewage collection system" means the common sanitary sewers, interceptor sewers and appurtenant equipment, such as lift stations, within a sewerage system which are primarily installed to receive wastewaters directly from facilities which convey wastewater from individual structures or from private property, and which include service connection "Y" fittings designed for connection with those facilities. The facilities which convey wastewater from individual structures such as building sewers and private interceptor sewers, from private property to the public sanitary sewer, or its equivalent, are specifically excluded from the definition of "sewage collection system"; except that pumping units and pressurized lines for individual structures or groups of structures are included as part of a "sewage collection system" when such units are cost effective and are owned and maintained by the sewerage system owner.

SECTION 53. NR 210.03 (13) to (15) are created to read:

NR 210.03 (13) "Sewage treatment facility overflow" means a release of wastewater from a location within a sewage treatment facility, other than permitted effluent outfall structures, directly to a water of the state or to the land surface. A sewage treatment facility overflow does not include blending, controlled diversions or discharges from permitted combined sewage treatment facility effluent outfall structures.

NR 210.03 (14) "Sewer extension" has the meaning specified under s. NR 110.03 (30p).

Note: Subsection NR 110.03 (30p) reads: "Sewer extension" means installation of a sewer or interceptor sewer, or extension thereof, to provide additional conveyance capacity and service to development within the existing or proposed tributary area of the extension. Alterations or modifications of existing sewerage systems designed to replace inadequate existing structures or installed because of inadequate hydraulic sewer capacity and that do not extend sanitary sewer service to areas previously not served are not sewer extensions.

NR 210.03 (15) "Sewerage System" has the meaning specified under s. NR 110.03 (30).

Note: Subsection NR 110.03 (30) reads: "Sewerage system" means all structures, conduits and pipes, by which sewage is collected, treated, and disposed of, except plumbing inside and in connection with buildings served, and service pipes, from building to street main.

SECTION 54. NR 210 Subchapter II (title), to follow s. NR 210.03, is created to read:

SUBCHAPTER II – MONITORING REQUIREMENTS AND EFFLUENT LIMITATIONS

SECTION 55. NR 210.035 is created to read:

NR 210.035 Applicability. This subchapter applies to publicly owned treatment works and privately owned domestic sewage treatment works that discharge to surface waters.

SECTION 56. NR 210, Subchapter III (title), to follow s. NR 210.07, is created to read:

SUBCHAPTER III – OPERATIONS, ANALYSES AND REPORTS

SECTION 57. NR 210.08 is amended to read:

NR 210.08 Emergency Operation. ~~**(1)**~~ All sewage treatment ~~works which~~ facilities that are subject to the provisions of this chapter shall be equipped for emergency operation. Emergency power shall be provided in accordance with s. NR 110.15 (5) (d). Sufficient emergency power shall be provided

~~so that~~such that all the following conditions are met:

(1) All sewage treatment facilities shall~~, at a minimum, be able to~~ maintain at least the equivalent of primary settling and effluent disinfection under all design conditions.

(2) All sewage treatment facilities discharging to class I, II, or III trout streams, or other critical stream segments as determined by the department, shall~~ be able to~~ operate all units critical to meeting the effluent limits as set forth in the WPDES permit for a minimum emergency period of 24 hours under all design flow conditions.

~~**(2)** Lift stations shall be provided with emergency operation in accordance with s. NR 110.14 (12).~~

SECTION 58. NR 210.12 is created to read:

NR 210.12 Blending. (1) FINDINGS. When issuing a permit, the department may, following review of the permit application and other information provided by the permittee, find that all the following conditions are met:

(a) Excessive flow received at a sewage treatment facility will cause severe property damage if blending is not approved, including damage to the sewage treatment facility which will cause the facility or portions thereof to become inoperable;

(b) The permittee demonstrates, as required by this section, that there are no feasible alternatives to blending such as the use of auxiliary treatment facilities, retention of untreated sewage or the provision of other treatment and operational alternatives, and;

(c) The permittee is required to notify the department of each blending occurrence as provided in subs. (6).

(2) BLENDING APPROVALS. Blending is prohibited, but may be approved by the department and included as a specific condition in a permit. Blending may only be approved and included as a condition in a permit when all the following conditions are met:

Note: The department may initiate enforcement action under s. 283.89, Stats., for any blending not specifically included as a condition in a permit.

(a) The department determines that blending may be necessary during wet weather and other high flow conditions to avoid severe property damage to the sewage treatment facility. Severe property damage occurs when the facility becomes inoperable due to loss of treatment efficiency from washout of biological media.

Note: A facility may be considered inoperable in cases such as, but not limited to, situations where there is a significant loss of treatment capacity in the secondary treatment unit or units as a result of wet weather or high flow conditions.

(b) The department determines the permittee is effectively implementing a CMOM program designed to reduce, to the maximum extent practicable, the entry of infiltration and inflow into the system, as required in s. NR 210.23.

(c) The department determines at each permit reissuance or permit modification related to the practice of blending that there are no feasible alternatives to the use of the blending, such as the use of auxiliary treatment or storage facilities, retention of untreated wastewater, reduction of excessive flow, use of adequate backup equipment, or an increase in the capacity of the sewage collection system or interceptor system.

Note: When evaluating feasibility of alternatives, the department may consider factors such as technical achievability, the relationship between the control of storm water and the control of infiltration and inflow into the sewage collection system, costs and affordability of implementation and risks to public health, the environment and welfare of the community served by the sewage collection system.

(d) The design of the sewage treatment facility is approved by the department to operate with blending.

(3) CONDITIONS FOR BLENDING. The following requirements shall be met whenever blending is included as a condition in a permit:

(a) Blending may occur temporarily only during wet weather or other high flow conditions when peak wastewater flow to the sewage treatment facility exceeds the maximum design and operating capacity of the biological treatment processes and when necessary to avoid severe property damage to the sewage treatment facility as determined under sub. (2) (a).

(b) Untreated, or partially treated wastewater that is routed around a biological treatment process, or a portion of a biological treatment process shall be recombined with the biologically treated wastewater and the combined flow shall be disinfected, if required by the WPDES permit, prior to discharge.

(c) Effluent from the sewage treatment facility shall be monitored to include all wastewater that is discharged from the facility, including those wastewaters that are diverted around the biological treatment process and shall meet the effluent limitations established in the permit including, at minimum, those limitations specified in s. NR 210.05 (1) (a) to (d).

(4) BLENDING APPROVALS. The department may approve and include a condition in a permit for blending if the permittee operates sewage treatment facilities approved by the department that provide a separate sewage treatment process or processes solely for excess flow or that provide a sewage treatment process as an alternative to a biological treatment process and complies with all other requirements of this section.

(5) PERMIT APPLICATIONS. A permittee may only apply for a department approval to include blending as a permit condition at the time of application for permit reissuance or permit modification. A permittee may use information in a facilities plan approved under ch. NR 110 in its permit application under this subsection. At the time of permit application, a permittee may demonstrate that the relevant information in a previously approved facilities plan is current. If the relevant information in the approved facilities plan is not reflective of current operations, the permittee shall submit new information or may update the facilities plan with new information that demonstrates there are no feasible alternatives to the use of blending.

(6) REPORTING. Any blending under this section shall be reported to the department by telephone, fax or email no later than 24 hours from the time each blending operation ceases at the sewage treatment facility, including operation of an alternative treatment process as provided in sub. (4). Permittees shall also report the time, duration and volume of wastewater routed around the biological treatment process, or routed through an alternative treatment process as provided in sub. (4), on the

wastewater discharge monitoring report form required by the permit. These reporting requirements shall apply whether blending was or was not included as a condition in the permit.

SECTION 59. NR 210 Subchapter IV (title), to follow NR 210.13, is created to read:

SUBCHAPTER 1V – OVERFLOWS AND SEWAGE COLLECTION SYSTEMS

SECTION 60. NR 210.19, 210.20, 210.205, 210.21, 210.22, 210.23, 210.24 and 210.25 are created to read:

NR 210.19 Applicability. This subchapter applies to all publicly owned treatment works and privately owned domestic treatment works that own and operate a sewage collection system, including satellite sewage collection systems

Note: Chapter NR 114 may require the certification of operators for sewage collection systems subject to the requirements of this subchapter.

NR 210.20. Permits for satellite sewage collection systems. All municipally owned satellite sewage collection systems shall be operated under the authorization of a general permit or an individual permit issued by the department. The department may require privately owned satellite sewage collection systems to be operated under the authorization of a general permit or an individual permit issued by the department if the department determines a permit is necessary to assure compliance with the requirements of this subchapter. General permits shall be issued following the procedures in s. NR 205.08 and shall require compliance with all applicable provisions of this subchapter. The department may issue an individual permit, including a compliance schedule for sewage collection system investigations and sewage collection system modifications, when necessary to assure compliance with the requirements of chapter.

NR 210.205. Combined sewer systems and overflows. Permittees that own and operate combined sewer systems, including combined sewage treatment facilities, shall comply with the specific requirements contained in the WPDES permit. Permittees that operate a combined sewer system shall be subject to the requirements of ss. NR 210.23 and NR 210.24. Discharges from combined sewer systems and overflows from combined sewage treatment facilities shall be reported to the department as required in the WPDES permit and the public shall be notified of such discharges in accordance with the emergency response plan required under s. NR 210.23 (4) (f). The department may require the permittee to notify the owner of a drinking water intake located in a surface water receiving any discharges from combined sewer systems.

Note: The department may consult with the requirements of 33 U.S.C. 1342 and U. S. environmental protection agency guidance when establishing permit conditions for combined sewer systems.

NR 210.21. Sanitary sewer overflows and sewage treatment facility overflows. (1) PROHIBITED OVERFLOWS. Sanitary sewer overflows and sewage treatment facility overflows are prohibited and may not be approved by the department nor authorized in a permit issued by the department. If applicable to an overflow event, permittees shall provide information that will enable the department to determine whether any of the following conditions exist:

Note: When used without qualification in this chapter, the word overflow includes both sanitary sewer overflow and sewage treatment facility overflow.

(a) The sanitary sewer overflow or sewage treatment facility overflow was unavoidable to prevent loss of life, personal injury or severe property damage.

(b) There were no feasible alternatives to the sanitary sewer overflow or sewage treatment facility overflow such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or preventative maintenance activities.

Note: When evaluating feasibility of alternatives, the department may consider factors such as technical achievability, the relationship between the control of storm water and the control of infiltration and inflow into the sewage collection system, costs and affordability of implementation and risks to public health, the environment and welfare of the community served by the sewage collection system.

(c) The sanitary sewer overflow or the sewage treatment facility overflow was caused by unusual or severe weather related conditions such as large or successive precipitation events, snowmelt, saturated soil conditions, or severe weather occurring in the area served by the sewage collection system or sewage treatment facility.

(d) The sanitary sewer overflow or the sewage treatment facility overflow was unintentional, temporary, and caused by an accident or other factors beyond the reasonable control of the permittee.

(2) DEPARTMENT RESPONSE. If a prohibited sanitary sewer overflow or sewage treatment facility overflow occurs, the department may, in addition to the factors provided in sub. (1), also consider the following factors in any enforcement action or response:

(a) The permittee's activities in implementing a capacity, management, operation and maintenance (CMOM) program, or a functionally equivalent program, that meets the requirements in s. NR 210.23.

(b) The status of preparation of a system evaluation and capacity assurance plan, or a functionally equivalent plan that meets the requirements of s. NR 110.10 (4), that may be required under s. NR 210.24.

(c) The status of implementation of an approved system evaluation and capacity assurance plan, or a functionally equivalent plan that meets the requirements of s. NR 110.10 (4), that may be required under s. NR 210.24.

(d) The status of planning or implementation of specific actions that conform to an approved facilities plan under s. NR 110.08, s. NR 110.09 and s. NR 110.10 and that meet the requirements of this chapter and s. NR 205.07 (1) (u).

(e) The status of planning or implementation of specific actions required by a WPDES permit, or other legally binding document, to construct or implement projects that will address the cause of the sanitary sewer overflow or sewage treatment facility overflow.

Note: The department may initiate enforcement action under s. 283.89, Stats., for any sanitary sewer overflow or sewage treatment facility overflow.

(3) PERMITTEE RESPONSE TO OVERFLOWS. Whenever a sanitary sewer overflow or sewage treatment facility overflow occurs, the permittee shall take all feasible steps to control or limit the volume of untreated or partially treated wastewater discharged, and terminate the discharge as soon as practicable. Remedial actions shall be implemented consistent with an emergency response plan developed under s. NR 210.23 (4) (f). Remedial actions may include the following:

(a) Interception and rerouting of untreated or partially treated wastewater around the point of failure, if that failure is in the sewage collection system.

(b) Use of vacuum trucks or other appropriate mechanisms to recover as much of the wastewater discharged as possible and properly dispose of such wastewater and wash down water.

(c) Cleanup of debris at the overflow site.

(d) Adequate sampling to determine the amount, characteristics and impact of the overflow.

(4) PERMITTEE REPORTING. Permittees shall report all sanitary sewer overflows and sewage treatment overflows as follows:

(a) The permittee shall notify the department by telephone, fax or email as soon as practicable, but no later than 24 hours from the time the permittee becomes aware of the overflow.

(b) The permittee shall, no later than five days from the time the permittee becomes aware of the overflow, provide to the department the information identified in this paragraph using department form number 3400-184. If an overflow lasts for more than five days, an initial report shall be submitted within 5 days as required in this paragraph and an updated report submitted following cessation of the overflow. At a minimum, the following information shall be included in the report:

1. The date and location of the overflow.

2. The surface water to which the discharge occurred, if any.

3. The duration of the overflow and an estimate of the volume of the overflow.

4. A description of the sewer system or treatment facility component from which the discharge occurred such as manhole, lift station, constructed overflow pipe, or crack or other opening in a pipe.

5. The estimated date and time when the overflow began and stopped or will be stopped.

6. The cause or suspected cause of the overflow including, if appropriate, precipitation, runoff conditions, areas of flooding, soil moisture and other relevant information.

7. Steps taken or planned to reduce, eliminate and prevent reoccurrence of the overflow and a schedule of major milestones for those steps.

8. A description of the actual or potential for human exposure and contact with the wastewater from the overflow.

9. Steps taken or planned to mitigate the impacts of the overflow and a schedule of major milestones for those steps.

10. To the extent known at the time of reporting, the number and location of building backups caused by excessive flow or other hydraulic constraints in the sewage collection system that occurred concurrently with the sanitary sewer overflow and that were within the same area of the sewage collection system as the sanitary sewer overflow.

11. The reason the overflow occurred or explanation of other contributing circumstances that resulted in the overflow event. This includes any information available under sub. (1), including whether the overflow was unavoidable to prevent loss of life, personal injury, or severe property damage and whether there were feasible alternatives to the overflow

Note: A copy of form 3400-184 for reporting sanitary sewer overflows and sewage treatment facility overflows may be obtained from the department or accessed on the department's web site at http://dnr.wi.gov/topic/wastewater/documents/3400-184_ssoreportform.pdf. As indicated on the form, additional information may be submitted to supplement the information required by the form.

(c) The permittee shall identify each specific location and each day on which a sanitary sewer overflow or sewage treatment facility overflow occurs as a discrete sanitary sewer overflow or sewage treatment facility overflow occurrence. An occurrence may be more than one day if the circumstances causing the sanitary sewer overflow or sewage treatment facility overflow results in a discharge duration of greater than 24 hours. If there is a stop and restart of the overflow at the same location within 24 hours and the overflow is caused by the same circumstance, it may be reported as one occurrence. Sanitary sewer overflow occurrences at a specific location that are separated by more than 24 hours shall be reported as separate occurrences.

(d) A permittee that is required to submit wastewater discharge monitoring reports under NR 205.07 (1) (r) shall also report all sanitary sewer overflows and sewage treatment facility overflows on that report.

(e) Satellite sewage collection system permittees shall submit reports required under this subsection to all owners of sewerage systems which receive wastewater from the satellite sewage collection system.

(5) PUBLIC NOTIFICATION. A permittee shall notify the public of any sanitary sewer and sewage treatment facility overflows consistent with its emergency response plan required under s. NR 210.23 (4) (f). Such public notification shall occur promptly following any overflow event using the most effective and efficient communications available in the community. At minimum, a daily newspaper of general circulation in the county(s) and municipality whose waters may be affected by the overflow shall be notified by written or electronic communication.

(6) NOTIFICATION OF DRINKING WATER SYSTEM OWNERS. The department may require the permittee to notify the owner of a drinking water intake located in a surface water receiving any sanitary sewer overflows and sewage treatment facility overflows. Such conditions shall be included in the WPDES permit.

NR 210.22 Building Backups. (1) Except for the reporting requirement established in s. NR 210.21 (4) (b) 10., building backups shall be subject only to requirements of this section.

(2) A building backup caused by the blockage or failure of the building sewer or any other component of a plumbing system as defined in s. SPS 381.01 (179), and discrete or individual building backups caused, or primarily caused, by excessive flow or hydraulic constraints within the sewage collection system shall not be subject to the requirements of s. NR 210.21 (1).

Note: Subsection SPS 381.01 (179) reads: "Plumbing system" includes the water supply system, the drain system, the vent system, plumbing fixtures, plumbing appliances and plumbing appurtenances that serve a building, structure or premises.

(3) Whenever there are recurring building backups caused, or primarily caused, by excessive flow or hydraulic constraints within a sewage collection system, the department may reissue or modify a WPDES permit to require actions by the permittee, including preparation and implementation of a system evaluation and capacity assurance plan as provided in s. NR 210.24, to reduce or eliminate such recurring building backups.

(4) Whenever there are building backups caused, or primarily caused, by excessive flow or hydraulic constraints within the sewage collection system and there are no sanitary sewer overflows within the same part of the sewage collection system, the building backups shall be reported in accordance with the requirements of ch. NR 208.

NR 210.23 Capacity, Management, Operation and Maintenance Programs. (1) CMOM PROGRAM REQUIRED. All permittees subject to this chapter, including the owners of satellite sewage collection systems and combined sewer systems, shall implement a capacity, management, operation and maintenance program.

(2) IMPLEMENTATION DEADLINE. The holder of a WPDES permit shall implement a capacity, management, operation and maintenance program under this section no later than the first day of the 36th month beginning after the effective date of this subsection [Legislative Reference Bureau inserts date] or no later than an earlier date specified in the permit.

(3) GENERAL STANDARDS. A CMOM program shall ensure the following general standards are met:

(a) The sewage collection system is properly managed, operated and maintained at all times.

(b) The sewage collection system provides adequate capacity to convey all peak design flows.

(c) All feasible steps are taken to eliminate excessive infiltration and inflow as defined in s. NR 110.03 (14), cease sanitary sewer overflows and sewage treatment facility overflows and mitigate the impact of such overflows on waters of the state, the environment and public health.

Note: When evaluating feasibility of alternatives, the department may consider factors such as technical achievability, the relationship between the control of storm water and the control of infiltration/inflow into the sewage collection system, costs and affordability of implementation and risks to public health, the environment and welfare of the community served by the sewage collection system.

(d) A process is in place to notify the public and other directly affected parties of any incidents of overflows from the sewerage system.

(e) Annual reports are submitted in accordance with the provisions of ch. NR 208.

(4) COMPONENTS OF CMOM PROGRAM.

(a) *Goals.* Major goals of the CMOM program shall be consistent with the general standards identified in sub. (3).

(b) *Organization.* Persons who are responsible for implementing the CMOM program shall be identified including administration, management and maintenance personnel or positions, lines of authority of such personnel or positions, internal and external communication responsibilities and the

person or persons who shall report all overflow events to the department and to the public according to s. NR 210.21 (3) to (6).

(c) *Legal authority*. Legally binding authorities, such as sewer use ordinances and service agreements, shall ensure the following:

1. Infiltration and inflow sources, including infiltration and inflow into building sewers, private interceptor sewers or other such sources on private property, are subject to oversight and control, as necessary.

2. New sewers and connections, including building sewers and private interceptor sewers are designed, constructed, installed, tested and inspected to meet all applicable current engineering and construction standards.

3. New and rehabilitated sewers, lift stations and other collection system components or appurtenances are installed, tested and inspected to meet all applicable current standards.

4. If applicable, sewage flows from municipal satellite or other privately owned sewage collection systems are, as necessary, monitored and controlled. Notwithstanding all other provisions of this chapter, any publicly owned treatment works may establish specific requirements to regulate sewage flows from satellite sewage collection systems.

5. Solid or viscous pollutants, such as fats, oils and greases, are not discharged into the sewage collection system in amounts that will cause or contribute to obstruction to the flow in the sewer.

Note: This provision is similar to that contained in s. NR 211.20 (2) (c).

6. Procedures are in place to implement enforcement actions for non-compliance with established legal authorities.

(d) *Operation and maintenance*. Operation and maintenance equipment, activities and protocols, including identification of personnel or positions responsible, shall, as appropriate and applicable to the system, include the following:

1. Adequate maintenance facilities and equipment including equipment and replacement parts inventories, especially critical replacement parts.

2. A map of the sewage collection system.

Note: A geographic information system-based map of the sewage collection system meets this requirement.

3. A management system for the collection and use of information to identify and prioritize appropriate operation and maintenance activities, including identification of structural deficiencies and implementation actions to address such deficiencies.

4. A description of routine preventive operation and maintenance activities such as inspections, televising, cleaning, flow monitoring, root removal, and rehabilitation.

Note: Protocols for cleaning sewers should include methods for disposal of sand, grit and other solids in a manner that will not contaminate surface water or groundwater or create a risk to public health. Proper disposal of

such material includes, but is not limited to, placement in a licensed solid waste landfill, return of the material to the headworks of the sewage treatment facility or placing the material in a properly designed and operated treatment unit.

5. A program to periodically assess the capacity of the sewage collection system and treatment facilities.

6. The identification of activities to prevent and correct frequent and recurring building backups caused by sewage collection system hydraulic constraints.

7. Appropriate training on a regular basis.

(e) *Design and performance standards.* The following standards and procedures shall be established or adopted to maintain control over the design, construction and inspection of the sewage collection system, including building sewers and private interceptor sewers on private property:

1. Standards and specifications for the design and installation of new sewers, lift stations and other appurtenances; and rehabilitation and repair projects.

Note: Chapter NR 110 must be followed when designing and constructing sewage collection systems. Chapter SPS 382 must be followed when designing and constructing plumbing. Permittees may have supplemental standards and requirements specific to community needs.

2. Procedures and requirements for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

(f) *Overflow emergency response plan.* An overflow emergency response plan shall identify measures to protect public health and the environment from sanitary sewer overflows and sewage treatment facility overflows and building backups caused by excessive flow or other hydraulic constraints in the sewage collection system and shall include protocols to ensure the following:

1. Responsible personnel are made aware of all overflows.

2. There is a prompt and appropriate response to and investigation of all overflows to protect, to the extent possible, water quality, the environment and public health.

3. There is appropriate reporting and notification as required under s. NR 210.21 (4) to (6). The overflow emergency response plan shall identify the public health and other officials who will receive notification and identify the protocols and procedures for notification of the public who may be affected by an overflow. Whenever there is a significant or potentially significant risk to public health, public notification shall include personal contacts with persons who may be at risk from the affects of the overflow.

Note: To the extent practicable, local public health and other responsible officials should be consulted in developing those portions of the overflow emergency response plan that involve reporting and notification of those officials. Permittees should consider use of the following communication methods when establishing public notification protocols: electronic mail or other electronic communication, posting on internet web sites, notification of local print and media (television, radio) outlets, posting notices on public buildings, personal notification, etc.

4. Appropriate personnel are aware of and follow the plan and are appropriately trained.

5. Emergency operations appropriate to the event are implemented.

(5) CMOM PROGRAM DOCUMENTATION AND AUDIT. All permittees subject to the requirements of this section shall do all of the following:

(a) Develop and maintain written documentation of the CMOM program components. Such documentation shall be available for department review on request. The department may request a permittee to provide this documentation or prepare a summary of the permittee's CMOM program at the time of application for reissuance of a WPDES permit.

Note: Annual verification of CMOM program documentation is required under ch. NR 208.

(b) At least annually conduct a self-audit of activities conducted under the permittee's CMOM program to ensure CMOM components are being implemented as necessary to meet the standards in sub. (3).

(6) EXCEPTIONS. If the owner of a sewage collection system believes any component part or parts of the CMOM program requirements in this section are not appropriate or applicable for a specific sewage collection system, the CMOM program documentation required under sub. (5) shall fully explain why that component part is not applicable.

(7) COMPLIANCE. Whenever a permittee's CMOM program does not meet the conditions established under this section, including the identification of and explanation for exceptions identified in subs. (6), the department may require specific actions to establish and implement a CMOM program or component parts of a CMOM program. The specific requirements may be included as conditions in a permit.

NR 210.24 System Evaluation and Capacity Assurance Plan. (1) The department may require permittees that own and operate a sewerage system to prepare and implement a system evaluation and capacity assurance plan that meets the requirements in NR 110.10 (4) whenever the department determines that one or more of the following conditions exists:

(a) Noncompliance with the prohibitions in s. NR 210.21 (1).

(b) Noncompliance with effluent limitations at the sewage treatment facility caused by excessive flow.

(c) Implementation of the CMOM program requirements in s. NR 210.23 is not sufficient to attain the requirements of s. NR 210.21 (1).

(d) Frequent or recurring building backups caused by excessive flow or other hydraulic constraints in the sewerage system.

(e) A system evaluation and capacity assurance plan is necessary to determine if the conditions of NR 210.21 (1) (a) to (d) exist.

(2) The system evaluation and capacity assurance plan is subject to review and approval under s. 281.41, Stats.

(3) The department may include in a permit compliance schedules that require implementation of actions contained in an approved system evaluation and capacity assurance plan and that are determined necessary to meet the requirements of this chapter.

(4) Permittees that are implementing actions to conform with an approved facilities plan under s. NR 110.08, s. NR 110.09 and s. NR 110.10 and that, when such facilities plan is implemented, will meet the requirements of this chapter and s. NR 205.07 (1) (u) shall not be subject to the requirements of this section.

NR 210.25 Emergency Operation – Lift Stations. All lift stations that are a component of a sewage collection system shall be equipped for emergency operation in accordance with NR 110.14 (12).

SECTION 61. EFFECTIVE DATE. This rule shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22 (2) (intro.), Stats.

SECTION 62. BOARD ADOPTION. The forgoing rule was approved and adopted by the State of Wisconsin Natural Resources Board on December 12, 2012.

Dated at Madison, Wisconsin _____

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By_____
Cathy Stepp, Secretary