

NATURAL RESOURCES BOARD AGENDA ITEM

SUBJECT: Request authorization for public hearings on Board Order No. WA-22-08, proposed NR 528 relating to the Management of Accumulated Sediment from Storm Water Management Structures

FOR: DECEMBER 2008 BOARD MEETING

TO BE PRESENTED BY: Gene Mitchell, Bureau of Waste and Materials Management

SUMMARY:

The proposed rule provides a risk-based regulatory framework that allows for an appropriate level of self regulation for those responsible for managing sediment removed from storm water sediment control structures. This streamlined approach to sediment management is needed to address the increasing number of storm water structures and corresponding growth in the volume of sediment. This is attributable to recent revisions to the Clean Water Act (CWA) for which the department is the delegated authority. The sediment is a solid waste regulated under Ch. 289, Stats. Currently, the department performs case-by-case evaluations in response to requests for special exemptions pursuant to s. NR 500.08(4) Wis. Adm. Code for sediment management projects. The proposed rule provides an alternative approach employing a certification form to ensure that those responsible for managing the accumulated sediment meet risk-based requirements to protect health and the environment. The proposed rule would positively impact those required by the state's storm water permit program to install and maintain sediment control structures. Those affected include municipalities and county government, commercial and residential developers and owners, consultants, environmental groups and citizens. The department has assembled a Technical Advisory Committee (TAC) comprised of representatives of these stakeholder groups to advise staff in drafting the rule.

RECOMMENDATION: Authorize public hearings for Board Order WA-22-08, proposed Chapter NR 528

LIST OF ATTACHED MATERIALS:

- | | | | | | |
|----|-------------------------------------|---|-----|-------------------------------------|----------|
| No | <input type="checkbox"/> | Fiscal Estimate Required | Yes | <input checked="" type="checkbox"/> | Attached |
| No | <input checked="" type="checkbox"/> | Environmental Assessment or Impact Statement Required | Yes | <input type="checkbox"/> | Attached |
| No | <input type="checkbox"/> | Background Memo | Yes | <input checked="" type="checkbox"/> | Attached |

APPROVED:

/s/	10/23/08
_____	_____
Bureau Director,	Date
/s/	10/27/08
_____	_____
Administrator,	Date
/s/	11/07/08
_____	_____
Secretary, Matt Frank	Date

cc: Laurie J. Ross - AD/8 Dan Graff - LS/8
 Gene Mitchell - WA/5 Carol Turner - LS/8
 Jack Connelly - WA/5 (11 copies)

DATE: October 24, 2008

TO: Natural Resources Board

FROM: Matthew Frank

SUBJECT: Request authorization for public hearing for Board Order WA-22-08, proposed Ch. NR 528, relating to the Management of Accumulated Sediment from Storm Water Management Structures

I. WHY THE RULE IS BEING PROPOSED

A. *Action or event that triggered the proposed rule?*

Installation of basins and similar structures to control pollution from stormwater runoff is growing – resulting in increased need to properly manage sediment derived from cleaning sediment control structures. Stormwater control requirements were put in place as part of USEPA's revisions to the Clean Water Act (CWA). The department, in accord with its responsibilities as a delegated program, then promulgated revisions to ch. NR 216 Wis. Adm. Code, effective August 1, 2004. These requirements increased the number of stormwater management structures for new development. In addition to the increase in stormwater management structures, there are numerous structures installed ten or more years ago that will soon require sediment removal in order to maintain storage and treatment capacity. All this results in an ever increasing volume of sediment requiring responsible management.

B. *What issues are addressed by this rule?*

The rule addresses the water pollution, habitat loss and human health risks of improper disposal of contaminated sediments. It helps avoid the inefficiency and potential inconsistency of a complete case-by-case review of disposal of contaminated sediment. Finally, it allows more efficient and cost-effective maintenance of stormwater facilities that help reduce water pollution.

The sediment removed from sediment control structures is a solid waste regulated under Chapter 289, Wis. Stats., and the NR 500 Administrative Code series. The department is responding to the need for efficient, consistent application of the law to such waste disposal

II. SUMMARY OF PROPOSED RULE

The rule proposes a system of self regulation based on certification by the sediment manager that all necessary steps have been taken to properly evaluate and manage any risks associated with the sediment and the intended use. The sediment manager attests to the above, agrees to perform any necessary monitoring and commits to maintaining all sediment management records.

A. *Self-regulation through sediment evaluation, compliance with appropriate regulatory requirements and signature on certification form.*

Certification is the cornerstone of this rule's framework and provides a guide through the

relationship between risk and level of regulatory requirements. Accountability in protecting health and the environment is ensured through the sediment manager's/environmental professional's signature attesting on the certification form that they judge that the sediment management will be performed in a manner that is protective of human health, welfare and the environment.

The sediment manager evaluates the risk associated with the desired end use option by considering the land uses that generate the runoff and sediment; in some instances sampling the sediment and interpreting the data; and evaluating the risks of the disposal options based on factors such as the soil's ability to attenuate pollutants.

B. Safeguard provisions to protect health and the environment

The rule includes setbacks from resources such as waters of the state, schools and private residences, general performance standards, erosion control measures, and ceiling levels for contaminants that may be found in the accumulated sediment that would disqualify the sediment from use under this rule. If ceiling levels are exceeded, the sediment would be required to be sent to a licensed landfill.

C. Selection of appropriate end uses for accumulated sediment

The end uses may include disposal at a landfill, general fill, confined geotechnical fill, landspreading, use in landscaping and contouring, site restoration, use or treatment at a dedicated site, or use under the control of another permitting authority. The appropriate end use is chosen based upon the level of risk the sediment poses. Finally, an exemption is provided that will facilitate proper maintenance through the removal of small volumes of coarse sediment that settles out near inlets to sediment detention structures.

D. Recordkeeping and records retention

Those responsible for sediment management must retain the certification form and any other sampling data, site monitoring records and sediment use records. The rule does not require that the information be submitted to the department, but it must be made available upon department request.

III. HOW DOES THE RULE AFFECT EXISTING POLICY?

The sediment that accumulates in storm water management structures is a solid waste under the solid waste rules, Chapters NR 500 through 538 Wis. Adm. Code. Sediment management proposals are currently addressed by the department on a case-by-case basis. The proposed rule will improve efficiency and consistency by providing a self regulation system with safeguard provisions. The rule lays out a clear and consistent regulatory structure for sediment management. The proposed rule provides clarity and predictable expectations to the regulated community and allows the department to efficiently use staff resources in an oversight role rather than through individual review of each disposal situation.

IV. HAS THE BOARD DEALT WITH THESE ISSUES BEFORE?

No.

V. WHO WILL BE IMPACTED BY THE PROPOSED RULES

The parties most affected by the proposed rule include county and municipal units of government that administer programs based on stormwater ordinances or manage sediment from their own structures. Others that may be affected include: developers or owners of housing developments, developers and owners of commercial or industrial sites, environmental groups, consultants and interested citizens.

The department has formed a Technical Advisory Committee (TAC) comprised of representatives of stakeholder groups that are affected by requirements to manage sediment from sediment control structures. This advisory committee, the Accumulated Sediment TAC, has provided advice and valuable input in the drafting of this proposed rule.

VI. POTENTIAL CONTROVERSY

Some may perceive that the proposed rule places a burden on local governments and developers. Those who have not yet had to clean out stormwater structures may believe that it is a new mandate (since it requires sediment managers to perform sampling (in some cases) and risk evaluation, followed-up by self-certification when managing accumulated sediment) even though this proposed rule merely clarifies and streamlines existing state requirements.

On the other hand, some may be concerned that the approach does not have adequate safeguards and enforcement provisions. They may fear that in some cases professional certification might be given without due diligence and that public health and the environment could be compromised.

VII. INFORMATION ON ENVIRONMENTAL ANALYSIS

Under the provisions of s. NR 150.03(6)(b)3b., Wis. Adm. Code, Environmental Analysis and Review Procedures for Department Action, this is a Type III action, since the rule will result in no material adverse impacts to the human environment. Therefore, the Waste and Materials Management program concludes and the Department's Integrated Sciences Services program confirms that it is not necessary to prepare an Environmental Assessment.

VIII. SMALL BUSINESS ANALYSIS

A. 1. *Describe the compliance and/or reporting requirements imposed on small business.*
The rule sets up a self-certification process with limited involvement from the Department. Under the current rules a person responsible (sediment manager) for the removal of accumulated sediment from a storm water management structure is required to take the sediment to a licensed landfill or apply for an exemption from the Department. This rule would eliminate the requirement to apply for an exemption when the owner of the storm water pond believes the sediment is clean enough to take to a site other than a landfill. The exemption request requires sampling of the sediment, submittal of fees to the Department and the time needed for the Department to review the request. In contrast to that process, the proposed rule walks the sediment manager through the disposal options and the evaluation needed to determine which end use is appropriate. There is no requirement to submit any of this

information to the Department, but the sediment manager will be responsible for keeping the self-certification form and supporting documents as part of a record keeping requirement. The record retention requirement is the responsibility of the sediment manager and it states that the completed certification forms, all sediment sampling results or other site monitoring results and site management records be retained for 20 years.

2. Can these compliance and/or reporting requirements be made less stringent for small business?

Depending on the nature of the business, the contaminants in storm water that accumulate in the sediment will be anywhere from no risk to high risk. This is true regardless of the size of the business. To set less stringent requirements, such as less testing of the contaminants or less record keeping would ignore the potential environmental hazard of this material. Without a proper analysis, it would be difficult to select the proper end use of the accumulated sediment that would be safe for both human and aquatic life. The sediment manager also retains the option to send the material to the landfill, in which case no record keeping is required.

B. 1. Describe the schedules or deadlines for compliance or reporting imposed on small business.

This rule and even the current situation have no schedule that the sediment manager has to meet. The sediment manager would initiate the process of analyzing the accumulated sediment when it is time to maintain the pond. The proposed rule outlines the procedure the sediment manager would take to determine the appropriate end use of the material. It does not include requesting a permit, so there is no schedule or deadline for compliance. Compliance with the rule is based on completion of a self-certification form and any sampling or monitoring necessary and then following through with the selected end use. The proposed rule has no requirement for the submittal of reports to the department so there are no schedules or compliance deadlines. Instead, all data and records are maintained by the small business.

2. Can these schedules or deadlines be made less stringent for small business?

Since there is no proposed schedule or deadline this question is not applicable.

C. Can the compliance or reporting requirements for small business be consolidated or simplified?

Since there are no reporting requirements that part of this question is not applicable. With regard to compliance, the certification form is the cornerstone of a process for self-regulation and is intended to simplify and streamline the regulatory process when compared with the existing requirements. Currently the sediment manager must take the material to a landfill or request an exemption. Department staff review the exemption requests on a case by case basis. There is concern that with the increase in the number of storm water practices as a result of storm water permit requirements, the Department staff will not have the resources to review exemption requests in a timely manner. The proposed rule is a way for the sediment manager to determine the appropriate end use without waiting for the Department. There will still be a certification form to document the decision which must be retained. This form is protection for the sediment manager in that it will verify that the sediment manager followed the procedures and made an appropriate decision based on Department guidance. The proposed rule favors performance standards over prescriptive standards thereby allowing the sediment manager

flexibility in designing and implementing the most effective approach in ensuring protection of public health and the environment.

D. Can performance standards be established for small businesses in lieu of design or operational standards?

The proposed rule identifies some obvious operational standards such as when the contaminants in the accumulated sediment are at levels considered too high to put the material anywhere but in a landfill. It also establishes conditions where the sediment would be considered safe for end uses other than in a landfill. Between these two extremes the sediment manager must select an end use that will meet performance standards and not have detrimental effects on wetlands, other surface water, endangered or threatened species or groundwater. There is flexibility in assessing the quality of the sediment and determining an appropriate end use. This is considered a performance standard as well.

E. Can small business be exempted from any or all requirements of the rule?

The state cannot exempt small businesses from this rule because of the environmental risk. Many businesses, even small businesses, store material outside or conduct activities outside that introduce contaminants into the storm water from their property. The contaminants collect in the storm water management structure. Removing that contaminated material and placing it somewhere in the environment that is safe for human and aquatic life is the desired outcome. The rule strives to identify appropriate end uses based on the risk to the environment. A small business can modify outside activities to reduce the concentration of contaminants in storm water. This would improve their chances of disposing of the accumulated sediment in a low-cost, safe manner.

F. Initial Regulatory Flexibility Analysis.

1. Describe the type of small business that will be affected by the rule.

Only small businesses that personally own a storm water treatment structure will be affected by this rule. Since 1994, new development has been required to implement storm water management practices to control runoff from the site. Originally 5 acres of land disturbance would trigger this requirement. In March of 2003 the threshold dropped to one acre of land disturbance. In 2004, new development had a performance standard placed on it that required the construction of storm water management structures to remove sediment. So this rule will affect small businesses that own storm water structures that remove sediment. Due to the timeline of the storm water rules it is likely that very few small businesses in operation before 2004 will be affected by this rule.

2. Briefly explain the reporting, bookkeeping and other procedures required for compliance with the rule.

This rule proposes to set up a self-certification process that would require the retention of the certification form and supporting information, but would not require submittal of any forms or reports to the Department. The sediment manager would retain all documents for 20 years. Compliance will be met by following the rule and disposing of the accumulated sediment in a manner consistent with the rule.

3. Describe the type of professional skills necessary for compliance with the rule.

The sediment manager will be the owner of the small business. In order to remove the sediment from a storm water management practice the sediment manager must sample the sediment and send it to a lab for analysis. The rule identifies how the sediment is to be sampled and the initial chemical constituents to test. The small business owner will have to enlist the

help of a professional engineer, hydrologist, geologist or soil scientist with training and experience to oversee the sampling and evaluate the potential for soil, surface water and groundwater contamination from the end use of the accumulated sediment.

Fiscal Estimate — 2007 Session

- Original Updated
 Corrected Supplemental

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number NR 528

Subject
 Management of Accumulated Sediment From Storm Water Management Structures

Fiscal Effect

- State: No State Fiscal Effect
 Indeterminate

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation.

- Increase Existing Appropriation Increase Existing Revenues
 Decrease Existing Appropriation Decrease Existing Revenues
 Create New Appropriation

Increase Costs — May be possible to absorb within agency's budget.

- Yes No

Decrease Costs

- Local: No Local Government Costs
 Indeterminate

1. Increase Costs
 Permissive Mandatory
 2. Decrease Costs
 Permissive Mandatory

3. Increase Revenues
 Permissive Mandatory
 4. Decrease Revenues
 Permissive Mandatory

5. Types of Local Governmental Units Affected:

- Towns Villages Cities
 Counties Others _____
 School Districts WTCS Districts

Fund Sources Affected

- GPR FED PRO PRS SEG SEG-S

Affected Chapter 20 Appropriations

Assumptions Used in Arriving at Fiscal Estimate

BACKGROUND

The storm water permit program requires new development, and in some cases existing development, to treat the runoff from impervious surface with water quality practices that remove total suspended solids. This has resulted in an increase in the number of such practices in the last five years and this trend is expected to accelerate in the future. Maintenance of these practices requires removal of the accumulated sediment every 10-20 years, depending on the storage capacity of the storm water management structures (ponds). The person responsible for removing the sediment, the sediment manager, may be a local unit of government including towns, villages, cities and counties and even school districts as well as private entities such as business owners and homeowner associations.

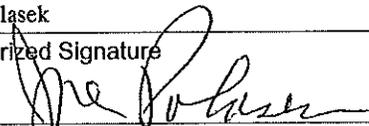
RULE SUMMARY

Under the current solid waste rules, this sediment can be taken to a licensed landfill, or the sediment manager can request an exemption from the department to place the material in a location other than a landfill. This exemption request requires the sediment manager to conduct sediment sampling and lab analysis at the discretion of the department reviewer. The relative newness of these ponds means that department staff has limited information on the environmental risk of this material and so the list of parameters to sample can be lengthy. There is also a fee associated with the request for exemption.

The proposed rule will identify minimum parameters to test for and some key threshold levels to assist the sediment manager in deciding the appropriate end use. The proposed rule also identifies when sampling for additional parameters may be necessary due to the nature of the material. Even when more analysis is warranted because indications of contamination are detected, it is likely that the simplified requirements in the proposed rule will reduce sediment evaluation costs. The sediment manager can use the rule and guidance to select an end use and then follow through with that decision without requesting approval from the department. The proposed rule is based on a self-certification process. This saves both time and money.

Long-Range Fiscal Implications

None

Prepared By: Joe Polasek	Telephone No. 266-2794	Agency Department of Natural Resources
Authorized Signature 	Telephone No. 266-2794	Date (mm/dd/ccyy) 09-19-08

Fiscal Estimate — 2007 Session

**Page 2 Assumptions Narrative
Continued**

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number NR 528

Assumptions Used in Arriving at Fiscal Estimate – Continued

STATE FISCAL

Implementation of the proposed rule would not increase or decrease the revenue to the department. Currently staff process exemption requests and associated review fees when they are submitted by a sediment manager. However, there have been relatively few requests to date. Therefore, there is not a significant revenue stream from this source. As the number of sediment ponds needing to be cleaned out increases with time, the revenue coming into the department would increase and more staff would be needed for the case-by-case reviews. The department does not have sufficient staff to review these submittals so instead prefers to implement the proposed self-certification approach which requires little direct staff involvement. This approach means the future revenue stream will be less than if the existing program were still being used, but the demand on staff time would be significantly less.

LOCAL AND PRIVATE FISCAL

The cost to sample and analyze for specific parameters is expected in most cases to be less than what is currently required with an exemption request. While it is anticipated that the overall cost to the sediment manager will be neutral or even less than under the current system, this difference cannot be quantified. Therefore the fiscal effect of the proposed rule is indeterminate for both local units of government and the private sector.

Fiscal Estimate Worksheet — 2007 Session
 Detailed Estimate of Annual Fiscal Effect

Original Updated
 Corrected Supplemental

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number NR 528

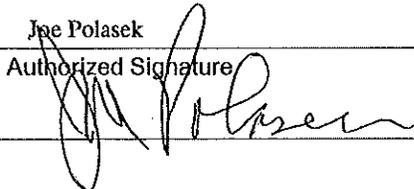
Subject
 Management of Accumulated Sediment From Storm Water Management Structures

One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):
 None

Annualized Costs:		Annualized Fiscal Impact on State Funds from:	
		Increased Costs	Decreased Costs
A. State Costs by Category			
State Operations — Salaries and Fringes		\$ -	\$ -
(FTE Position Changes)		(- FTE)	(- FTE)
State Operations — Other Costs		-	-
Local Assistance		-	-
Aids to Individuals or Organizations		-	-
Total State Costs by Category		\$ 0	\$ - 0
B. State Costs by Source of Funds			
		Increased Costs	Decreased Costs
GPR		\$ -	\$ -
FED		-	-
PRO/PRS		-	-
SEG/SEG-S		-	-
State Revenues	Complete this only when proposal will increase or decrease state revenues (e.g., tax increase, decrease in license fee, etc.)	Increased Revenue	Decreased Revenue
GPR Taxes		\$ -	\$ -
GPR Earned		-	-
FED		-	-
PRO/PRS		-	-
SEG/SEG-S		-	-
Total State Revenues		\$ 0	\$ - 0

Net Annualized Fiscal Impact

	<u>State</u>	<u>Local</u>
Net Change in Costs	\$ 0	\$ 0
Net Change in Revenues	\$ 0	\$ 0

Prepared By: Joe Polasek	Telephone No. 266-2794	Agency Department of Natural Resources
Authorized Signature 	Telephone No. 266-2794	Date (mm/dd/ccyy) 09-19-08

DRAFT

State of Wisconsin
Department of Natural Resources
Box 7921, Madison WI 53707-7921

DRAFT Accumulated Sediment End Use Certification
Form 4400-248

NOTICE: This form must be completed and retained by the sediment manager prior to the initiation of the end use of accumulated sediment from a stormwater management structure, in accordance with ch. NR 528, Wis. Adm. Code. Completion of the worksheets included in this form directs the user to the appropriate level of certification necessary to comply with the requirements of ch. NR 528, Wis. Adm. Code. The user may consult technical support materials provided by the department to assist in the management of accumulated sediment in a beneficial and safe manner. Personal information is not intended to be used for any other purpose, but may be made available to requesters under Wisconsin's Open Records laws (s. 19.35, Wis. Stats.).

Anyone completing this form must complete Sections 1, 2 and 3. Unless otherwise directed, the sediment manager shall complete Part A and if appropriate, ensure that Part B is completed.

Section 1 – Basic Information

Contact Name	Company		
Contact Title	Telephone		
Mailing Address	City	State	Zip

Section 2 – Site Specific Information

Name of Storm Water Management Structure

Location (Township, section, range)

Construction Year	Date sediment was last removed (if applicable)
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Section 3 – End Use Site Information

Location of Site where Accumulated Sediment is to be used (Township, section, range)

Briefly describe manner in which the accumulated sediment will be used in accordance with s. NR 528.07, Wis. Adm. Code.

Part A Sediment Manager Certification

To be completed by the sediment manager to evaluate the drainage area from which the accumulated sediment was removed and determine if the certification criteria listed below have been met.

Part A Worksheet

Information on Drainage Area to Storm Water Management Structure

Percent of Land Uses	
	Open Space (parks, cemeteries, woodlands)
	1 and 2 Family Residential
	Multi-Family Residential (3 or more)
	Institutional (schools, hospitals, churches, offices)
	Light Industrial (no outdoor material storage)
	Commercial (malls, shopping centers)
	Heavy Industrial (some outdoor material storage)
Presence of Areas of Suspected Contamination or Other Concerns Based on Site History (Yes or No)	
	Heavy manufacturers, recycling facilities, bulk storage piles
	Storage and loading areas of light manufacturers
	Vehicle Fueling and Maintenance areas (gas stations)
	Arterial Roads (multi-lane, high traffic)
	Commercial with 40 or more stalls
	Commercial with drive-ins
	Leaking underground storage tanks currently or previously on property
	Spills of chemicals, oil or hazardous materials
	Large snow storage areas
	Agriculture land use history suggests persistent pesticides may be in sediment
	Other?

Refer to Part A Worksheet prior to certifying the information below.

Based on Part A Worksheet, I determine the drainage area to the storm water management structure meets the following criteria (check any that apply):

- 1. Has less than 15% commercial, multi-family residential, institutional and industrial land uses combined.
- 2. Has no areas of suspected contamination.
- 3. Has no other existing conditions or known historical events that may affect the likelihood of safe sediment management.
- 4. Has no reported hazardous substance spills per ch. 292.11, Stats. since construction or since accumulated sediment was last removed (provide date of last sediment removal in Section 2).

Based on whether the above four criteria are met, the following steps have been taken (check any which apply):

- The drainage area to the storm water management structure meets all 4 criteria so sampling under s. NR 528.06(3), Wis. Adm. Code is not required and I am certifying under Part A and do not have to complete Part B.
- The drainage area to the storm water management structure does not meet all 4 criteria so sampling under s. NR 528.06(3), Wis. Adm. Code is required and an environmental professional must certify under Part B.

Record retention is being carried out as follows (check if true):

- Record keeping is performed in accordance with s. NR 528.08, Wis. Adm. Code.

DRAFT

Certification Statement

I hereby certify that the accumulated sediment will be used in the manner specified in Section 3, the performance standards in s. NR 528.04(2), Wis. Adm. Code will be met and the erosion control measures in s. NR 528.04(3), Wis. Adm. Code will be implemented. I certify that the information provided in sections 1, 2 and 3 and Part A on this form is true, accurate and complete to the best of my knowledge and I agree to retain this form and other data records in accordance with s. NR 528.08, Wis. Adm. Code.

Sediment Manager

Title

Date

Part B Professional Certification

Part B must be completed by a professional geologist, hydrologist, engineer or soil scientist.

Based on information obtained in Part A, the following action was taken (check those that apply):

- The drainage area meets criteria 2, 3 and 4 but does not meet criterion 1, so routine sampling under NR 528.05(3)(b)1. to 4. was performed under my direction, I reviewed the results and have determined the following actions will be taken (check any which apply):
 - NR 528.04(4) Table 2 ceiling levels were exceeded so the sediment will be taken to a licensed landfill.
 - NR 528.04(4) Table 2 ceiling levels were not exceeded but sampling results for indicator parameters listed under NR 528.06(3)(b)3. and 4. indicated elevated levels of contaminants, so follow-up sampling in accordance with NR 528.06(3)(b)5. has been performed and I have evaluated the results under Part B2.
 - NR 528.04(4) Table 2 ceiling levels were not exceeded and the sampling results for indicator parameters listed under NR 528.06(3)(b)3. and 4. did not indicate elevated levels of contaminants, so I am recommending the end use described under Section 3 and complete certification statement.
- The drainage area does not meet criteria 2, 3 or 4, so go to Part B1 to determine additional parameters to add to the routine sampling.

Part C Dedicated Sediment Management Site Certification

To be completed by the sediment manager wishing to use accumulated sediment at a dedicated sediment management site in accordance with NR 528.07(5). Sections 1, 2 and 3 at the beginning of the form must also be completed.

The following management requirements have been implemented at the dedicated sediment management site (check those that apply):

- Site is owned or leased by a municipality or other responsible unit of government.
- Sediment application at a depth of 18 inches or less below ground surface.
- Additional practices to control run-on and runoff or monitoring of soils, plant tissue or other environmental receptors or evaluation of sampling data to ensure safe long term site use pursuant to NR 528.07(1)(b).
- Record keeping was performed in accordance with NR 528.07(5)(d).
- An affidavit indicating the site has been used as a dedicated sediment management site has been filed in the registrar of deeds office in the county where the site is located.

Certification Statement

I am a professional engineer registered to practice in Wisconsin or a geologist, hydrologist or soil scientist licensed to practice in Wisconsin and am qualified by training and experience to evaluate the potential for soil, surface water and groundwater contamination from the end use of accumulated sediment.

I hereby certify that the accumulated sediment is not a hazardous waste, as defined by s. NR 661.03, Wis. Adm. Code. I hereby certify that the information provided in Part B, B1, B2 and C on this form is true, accurate and complete to the best of my knowledge. Based on my evaluation of the accumulated sediment sampling results, intended end use, site specific factors at the use site and management practices I certify that if the end use chosen in Section 3 is properly implemented, the site will meet the performance standards in s. NR 528.04(2), Wis. Adm. Code and it is likely the site will not cause any significant risk to public health, safety or welfare or the environment.

My professional opinion is given to a reasonable degree of professional certainty, and is based upon my evaluation of reasonable and sufficient information and generally accepted engineering and scientific practices.

Engineer/Geologist/Hydrologist/Soil Scientist	Title	Date
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Registration Number	Seal
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Part D Coarse Grained Sediment Certification

To be completed by the sediment manager wishing to dispose of 100 cubic yards or less of primarily coarse grained accumulated sediment such as that found in the forebay. Sections 1, 2 and 3 at the beginning of the form must also be completed.

The following criteria are met (check those that apply):

- The quantity of accumulated sediment to be managed is 100 cubic yards or less.
- No more than 15% of the accumulated sediment material, percent by weight, passes a No. 200 sieve.
- As sediment manager I agree to maintain responsibility for disposal of the accumulated sediment.
- All 3 criteria in Part D are met, so the material does not need to be sampled and the sediment shall be managed in accordance with NR 528.04(1) and (2).
- Record keeping was performed in accordance with NR 528.08.
- One or more of the 3 criteria in Part D are not met, so the material may not be managed under NR 528.08(2) so it must be managed under NR 528.05.

Certification Statement

I hereby certify that the accumulated sediment will be used in the manner specified in Section 3 and in accordance with ch. NR 528, Wis. Adm. Code and, the performance standards in s. NR 528.04(2), Wis. Adm. Code will be met. The information provided in sections 1, 2 and 3 and Part D is true, accurate and complete to the best of my knowledge. This form and other data records will be retained in accordance with s. NR 528.08, Wis. Adm. Code.

DRAFT

Sediment Manager

Title

Date

**Technical Advisory Committee for Proposed NR 528
Management of Accumulated Sediment from Storm Water Management Structures**

Person	Organization
Jim Bachhuber	Earth Tech AECOM (Consulting firm)
Jeremy Balousek, P.E.	Dane County Land and Water Resources Department
Lynita Docken	Department of Commerce
Greg Fries, P.E.	City of Madison
Lorie Grant	Wisconsin River Alliance
Paul Kent	Municipal Environmental Group
Thomas Marquardt Town of Grand Chute Public Works Director	Wisconsin Towns Association
Jim McMillian	Department of Administration
Pat Stevens	Wisconsin Builders Association

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCE BOARD
AMENDING AND CREATING RULES

The Wisconsin Natural Resource Board proposes an order to **amend** s. NR 149.02(1)(Note) and **create** ch. NR 528 relating to the management of accumulated sediment from storm water management structures

WA-22-08

Analysis prepared by the Department of Natural Resources

1. Statutes Interpreted

ss. 289.43, 289.91 and 299.11, Stats.

2. Statutory Authority

ss. 227.11, 289.05, 289.06, 289.07 and 299.11, Stats.

3 Explanation of Agency Authority to Promulgate the Proposed Rule Under the Statutory Authority

Section 227.11, Stats., confers general agency rule-making authority. In ss. 289.05, 289.06 and 289.07, Stats., the Department has the duty and authority to promulgate rules implementing ch. 289, Stats. In s. 299.11(1)(d)9., Stats., the Department has the authority to promulgate rules implementing ch. 299, Stats.

4. Related Statute or Rule

None

5. Plain Language Analysis

With an ever-increasing volume of sediment to be managed in the cleaning of storm water and sediment control structures coupled with a need to maximize the effectiveness of reduced department staff resources it is necessary to develop an innovative and proactive regulatory approach. This proposed rule would create a framework for self regulation for the management of sediment obtained when cleaning storm water sediment control structures. The proposed rule would place the department in an oversight role thereby minimizing and targeting uses of scarce staff resources. Further, the proposed rule provides a reasonable, safe and consistent approach in managing end uses of accumulated sediment. The department has worked with a Technical Advisory Committee (TAC) to obtain input and advice from affected stakeholders.

6. Summary of and Preliminary Comparison to Existing or Proposed Federal Regulations Intended to Address the Activity to be regulated by the Proposed Rule Revisions

There are no federal regulations pertaining explicitly to the management of sediment accumulated in storm water and sediment control structures. The sediment is generated as a consequence of compliance with the Clean Water Act.

7. Comparison of Similar Rules in Adjacent States (Minnesota, Iowa, Illinois and Michigan)

Adjacent states have not developed specific rules to address the material that accumulates in storm water management structures. However, they do have rules to address other dredge materials and they use those rules to answer questions about where to go with accumulated sediment in storm water ponds.

Iowa has a permit by rule approach to land application of any material. This is currently a catch all for all material disposal and they are considering going to designating beneficial uses. Under the permit by rule approach, if the material meets a set of criteria they do not need a permit for disposal. The criteria include testing for petroleum content and following setback parameters similar to the federal 503 regulations which establish standards for the use and disposal of sewage sludge. This approach is similar to Wisconsin's intent to have a rule that provides enough information for the user to self certify that they have used or disposed of the material properly. Iowa has found that the permit by rule approach results in very few contacts or questions from the public.

Minnesota also has a general management approach for dredged material that the accumulated sediment from storm water ponds would fall into. The state recognizes that it would be beneficial to customize the rules to address accumulated sediment from storm water. Similar to the proposed DNR code, dredged material can be handled differently depending on the amount of sand in the material, how much material is being handled, what testing suggests about the contaminant levels and the potential disposal sites. For example, in Minnesota, no permit is needed for disposal of less than 3,000 cubic yards with 93% or more sands. The DNR rule proposes a de minimus of 100 cubic yards for material with 85% or more sands. For all other sediment Minnesota requires an extensive sediment characterization of the pollutant levels in the material and this information determines the management options and whether the disposal qualifies for a general or individual permit. The general permit sets thresholds and criteria that if met, allows a streamlined permit process. The proposed DNR code would not require a permit at all and the sediment manager would only contact the department if they were concerned about the results of the sediment characterization and had questions about what end use option to select. Minnesota also encourages consideration of use or reuse options rather than disposal in a landfill.

Michigan considers the material in storm water ponds and catch basin sumps to be process water once it comes time to clean it out. When the liquid portion is separated from the solid material it is covered under a set of rules that governs liquid industrial waste. In some cases it can be discharged to the sanitary sewer system, if approved by the local sewer authority, but other options are available. The solids are handled as a solid waste under a separate set of rules. Testing of certain parameters is required before disposing of the material although the most likely disposal is to a landfill. The transporter of the material has to meet applicable transporter requirements.

Illinois has limited guidance on what to do with sediment that accumulates in storm water ponds. If the contents are strictly storm water and there is no septic or sewage mixed in, then it can be disposed of anywhere in an upland location, but not in the floodway. No

sampling or any other testing or evaluation is required. Storm water pond sediment is not considered a solid waste unless the agency is aware of, or notified that, a spill of some contaminant occurred in the drainage basin. Anyone removing sediment from a storm water pond will be cautioned that they must check with the Army Corps of Engineers if they are close to a waterway to see if a permit is required.

8. Summary of the Factual Data and Analysis Methodologies That the Agency Used in Support of the Proposed Rules and How Any Related Findings Support the Regulatory Approach Chosen for the Proposed Rules

There is an increasing number storm water and sediment control structures coming on-line as a result of more comprehensive storm water control requirements imposed by the USEPA's revisions to the Clean Water Act (CWA). The department, in accord with its responsibilities as a delegated program, then promulgated revisions to ch. NR 216, effective August 1, 2004. To address the increase in both the number of structures and the volume of accumulated sediment, the department has developed a streamlined approach to sediment management featuring self-regulation. The department has identified stakeholders who will be affected by the proposed rule and formed a Technical Advisory Committee (TAC) comprised of representatives of these organizations and interests. The department has met with this TAC five times in 2007 and 2008 to obtain their input and advice in writing rule language for this streamlined approach to sediment management.

9. Any analysis and Supporting Documentation that the Agency Used in Support of the Determination of the Proposed Rule's Effect on Small Business.

The proposed rule for sediment management, ch. NR 528, is expected to reduce costs to small businesses. Currently, compliance with the department's existing rules, ch. NR 216, Wis. Adm. Code, is resulting in an increase in the number of storm water practices for small business. Routine maintenance of these sediment control structures generates accumulated sediment. Under existing solid waste rules, the NR 500 series, a person responsible for cleaning out a sedimentation pond may either transport the sediment to a licensed landfill or apply to the solid waste program for an exemption. By eliminating the need to apply for an exemption and removing the need for the department to approve the end use chosen by small business, the costs to small business will be reduced.

The proposed rule is also expected to reduce costs to small business by simplifying and clarifying the process and thereby providing known expectations for small business. Further, because the department's role is greatly reduced, costs owing to any delays that result from the current departmental review process for sediment management proposals is eliminated. Because of the proposed self regulation process, project timing would be completely under the control of the small business.

Likewise, because submittal of reports to the department is eliminated, costs normally associated with submitting these reports are eliminated. Instead, the self-certification process provides a logical flow through the sediment evaluation and management process and all data and records are maintained by the small business. Further, costs associated with sediment sampling and lab analysis are reduced under the proposed rule because the number of parameters is greatly reduced in most cases. Even when more analysis is warranted because indications of contamination are detected, it is likely that the simplified requirements in the proposed rule will still reduce sediment evaluation

costs. Current department rules do not specify how the sediment must be characterized so staff can be inconsistent in what they require and in an effort to be prudent, often choose an extensive list of compounds for which to analyze. The proposed rule includes a specific list that is considerably shorter and thus reduces sampling costs. For additional detail and analysis please see the “Small Business Analysis”.

10. Anticipated Cost Incurred by the Private Sector

The impact to the private sector should be neutral to positive. The private sector affected by this rule would include home owner’s associations, industrial, commercial and institutional property owners that own a storm water management structure. The owner would become the sediment manager when maintenance is required on the structure and sediment removed. Currently they need to take that material to a landfill or apply for an exemption with the department. The exemption process requires sampling and evaluation of the potential risk of the material and is handled on a case-by-case basis by regional staff. This rule will clarify the sampling and evaluation that is appropriate to do and will not require submittal to the department, saving time and money. The sediment manager can self-certify that they have followed the rule and guidance and used the accumulated sediment in a safe and environmentally friendly manner. This will result in either no change or more likely a net savings in time and money for the private sector.

11. Effect on Small Business

The rule revisions will have a neutral to net positive effect on small businesses since they would otherwise have to comply with existing requirements. Under existing rules a sediment manager, when cleaning out a storm water management structure must either take the sediment to a licensed landfill or apply with the waste and materials management program for an exemption. This proposed rule would eliminate the requirement to apply for an exemption when the sediment manager determines that the sediment is clean enough to take to an end use site. Further, the proposed rule provides other end use options that will usually be less expensive than costs associated with transportation distance to the licensed landfill and the tipping fees at the landfill.

12. Agency Contact Person

Jack Connelly

13. Comments are submitted to the Following Address and the Deadline for Submittal

Jack Connelly
Bureau of Waste and Materials Management
PO Box 7921
Madison, WI 53707-7921
Attention: NR 528 Proposed Rule

Deadline for comments will be set as part of the public hearing process.

SECTION 1. NR 149.02(Note) is amended to read:

Note: Administrative codes and programs requiring analyses to be performed by a certified or registered laboratory are chs. NR 110 – Sewerage Systems, 113 – Servicing Septic Systems, 123 – Well Compensation Program, 131 – Metallic Mineral Prospecting, 132 – Metallic Mineral Mining, 140 – Groundwater Quality, 145 – Private Wells, 150 – Environmental Analysis and Review Procedures, 157 – Management of PCBs, 158 – Hazardous Substance Discharge Notification, 182 – Metallic Mining Waste, 206 – Land Disposal of Municipal and Domestic Wastewaters, 210 – Sewage Treatment Works, 211 – General Pretreatment Requirements, 212 – Wasteload Allocated Effluent Limits, 214 – Land Treatment of Industrial Liquid Wastes, 216 – Storm water Management, 219 – Analytical Test Methods and Procedures, 347 – Sediment Sampling and Analysis, 507 – Environmental Monitoring for Landfills, 528 – Management of Accumulated Sediment from Storm Water Management Structures, 661 – Hazardous Waste Identification and Listing, 662 – Hazardous Waste Generator Standards, 664 – Hazardous Waste Treatment, Storage and Disposal Facility Standards, 665 – Interim License Hazardous Waste Treatment, Storage and Disposal Facility Standards, 700 – General Requirements for Investigation and Remediation of Environmental Contamination, 712 – Environmental Response Actions, 716 – Site Investigations, 809 – Safe Drinking Water, 811 – Design of Community Water Supplies, 845 – County Administration of NR 812 (Private Wells), and HFS 46 – Group Day Care Centers for Children.

SECTION 2. NR 528 is created to read:

Chapter NR 528
MANAGEMENT OF ACCUMULATED SEDIMENT
FROM STORM WATER MANAGEMENT STRUCTURES

NR 528.01 Purpose. The purpose of this chapter is to provide a streamlined process for the management of accumulated sediment removed from storm water management structures in a manner that protects public health and the environment and reduces the need to dispose of accumulated sediment in landfills. This chapter is adopted under authority of s. 227.11, Stats., and ch. 289, Stats.

NR 528.02 Applicability. (1) Except as otherwise provided, this chapter governs the management of accumulated sediment from storm water management structures.

(2) This chapter applies to a sediment manager who is required or authorized to undertake the removal and subsequent management of the accumulated sediment derived from the operation and maintenance of storm water management structures.

(3) This chapter does not apply to any of the following activities:

(a) Removal of sediment from catch basin sumps and other proprietary storm water sedimentation devices, or structures designed to treat grease, oil, or grit, or disposal of material collected through street sweepings.

(b) Sediment managed subject to the permit requirements of s. 30.30 or 30.31, Stats., for harbor improvements.

(c) The disposal of hazardous waste under chs. NR 660 to 679.

(d) The management of solid waste regulated under chs. NR 518 and 538.

(e) Sediment removed from temporary sediment control practices during the construction phase of a project.

Note: Use of this code does not release the sediment manager from the requirement to obtain other permits as appropriate. Permits may include ch. NR 216, for land disturbance of one or more acres, ch. 30, Stats., for waterway and wetland activities such as dredging of ponds, culvert cleaning, and ch. 283, Stats., for general wastewater discharges such as Pit/Trench Dewatering and Carriage and Interstitial Water from Dredging Operations.

NR 528.03 Definitions. The following definitions as well as the definitions in ch. 289, Stats., and s. NR 500.03 are applicable to the terms used in this chapter.

(1) “Accumulated sediment” means settleable solid material contained in storm water runoff that is collected, retained and subsequently removed from storm water management structures.

(2) “Confined fill” includes a sediment used in a manner which results in it being covered by earth, concrete, asphalt, a building or similar material and thus not exposed to the environment.

(3) “Dedicated sediment management sites” means sites designed and operated for multiple applications of accumulated sediment from one or more storm water management structures where the accumulated sediment is landspread or treated.

(4) “Drainage area” means the land area from which the storm water management structure receives runoff.

(5) “End use of accumulated sediment” includes use in agriculture, landscaping, site stabilization, construction, transportation projects, fill, backfill, reclamation of disturbed sites including mine reclamation, the placement of accumulated sediment and similar uses.

(6) “Forebay” includes a pond-like structure that receives storm water prior to its entrance into the main portion of the pond with the purpose of removing coarse-grained sediment.

(7) “General fill” means a location where accumulated sediment is used as fill in a natural topographic depression, an excavation such as an existing borrow area or an intentional excavation or to build up or shape the local landscape.

(8) “Landspreading of accumulated sediment” means the application of accumulated sediment in thin layers to the surface of the land or incorporation into subsurface soils.

(9) “Licensed landfill” means a solid waste disposal facility with a license obtained pursuant to ch. 289, Stats.

(10) “Sediment manager” means any person with responsibility for the management of the accumulated sediment and may include those holding fee title, an easement or other interest in a property, or their agent including contractors or subcontractors and others required or authorized to undertake removal and subsequent management of accumulated sediment, including data gathering, reporting and recordkeeping.

(11) “Storm water management structure” means a device that detains, retains and treats storm water runoff resulting in the accumulation of sediment, total suspended solids and pollutants carried in the runoff. Structures shall have an outlet that discharges to waters of the state but only in response to storm events. A storm water management structure includes wet and dry detention ponds and infiltration basins. A storm water management structure does not include landscape ponds on private property with no designed inlet or outlet.

(12) "Waters of the state" means those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, water courses, drainage systems and other surface water or groundwater, natural or artificial, public or private within the state or under its jurisdiction, except those waters which are entirely confined and retained completely upon the property of a person.

NR 528.04 Locational criteria, performance standards, erosion control measures and ceiling levels. The sediment manager shall ensure that the management option selected for the accumulated sediment is implemented in accordance with the following criteria:

(1) **LOCATIONAL CRITERIA.** (a) Except as provided in par. (b), a site where accumulated sediment is used or deposited shall meet the locational criteria in Table 1.

(b) The locational criteria do not apply to sediment from a drainage area that meets all the criteria in s. NR 528.06 (2) or to sediment used in an end use in accordance with s. NR 528.07 (3) or to sediment managed under s. NR 528.07 (7).

**Table 1
Locational criteria for management of accumulated sediment**

	Bedrock or ground-water table	Public water supply well	Private water supply well	Lake, wetland, pond, or any navigable waterway or sinkhole	Residence	School, Health – care Facility ¹
Separation distance in feet	3	1,200	250	500	500	1,000 surface spread 500 incorporated

¹ when fecal coliform levels are greater than 1,000 MPN per dry gram weight and landspreading is the chosen management option.

(2) **PERFORMANCE STANDARDS.** (a) No person may use or dispose of accumulated sediment at a site if there is a reasonable probability that the sediment end use will cause any of the following:

1. A significant adverse impact on wetlands as defined in ch. NR 103.
2. A take of an endangered or threatened species prohibited by s. 29.604, Stats.
3. A detrimental effect on any surface water.
4. A detrimental effect on groundwater quality that will cause or exacerbate an exceedance of any preventive action limit or enforcement standard at a point of standards application as defined in ch. NR 140. The point of standards application is defined by s. NR 140.22 (1).

(b) The accumulated sediment end use shall comply with all applicable department approvals, federal, state and local requirements and be conducted in accordance with this subsection.

Note: Use of this code does not release the sediment manager from the requirement to obtain other permits as appropriate. Permits may include ch. NR 216, for land disturbance of one or more acres, ch. 30, Stats., for waterway and wetland activities such as dredging of ponds, culvert cleaning, and ch. 283, Stats., for general wastewater discharges such as Pit/Trench Dewatering and Carriage and Interstitial Water from Dredging Operations.

(3) EROSION CONTROL MEASURES. The sediment manager shall take measures to control run-on and runoff, minimize the area disturbed by the project, minimize loss of fugitive dust and retain sediment on the site during and after the placement of the accumulated sediment. Runoff control measures shall be effectively inspected and maintained. Any area where topsoil is exposed shall be seeded and mulched or otherwise stabilized within 48 hours. Where applicable, the requirements in ch. NR 216 shall be followed.

(4) CEILING LEVELS. If the sample results obtained in accordance with s. NR 528.06 (3) (b) exceed any of the ceiling levels listed in Table 2, the sediment manager shall dispose of the accumulated sediment in a licensed landfill.

Table 2
Ceiling levels governing management of accumulated sediment

Parameter	Ceiling level
Total Arsenic	8 ppm
Total Cadmium	10 ppm
Total Chromium	100 ppm
Total Lead	250 ppm
pH	Less than 5 or greater than 10 standard units
Electrical conductivity	8 mmhos per centimeter at 25°C

NR 528.05 Management decisions. (1) The sediment manager shall determine from the options listed in s. NR 528.07 an appropriate end use for the accumulated sediment based on consideration of all of the following factors:

- (a) Evaluation of sediment sample data in s. NR 528.06 (4).
- (b) Completion and evaluation of the appropriate portions of the certification form supplied by the department.
- (c) Factors specific to the site where sediment is generated as identified in s. NR 528.06 (3) (b) 5.
- (d) Factors specific to the site proposed for end use of the accumulated sediment.
- (e) Any other factors relevant to the minimization of risk to public health, safety or welfare or the environment.

(2) No sediment may be used in a manner which is likely to cause any significant risk to public health, safety or welfare or the environment.

NR 528.06 Sediment evaluation, certification requirements and end use determination. Except in cases where the accumulated sediment will be disposed of in a licensed landfill, the sediment manager shall evaluate the characteristics of the drainage area from which the accumulated sediment is removed, sample the accumulated sediment, where applicable, evaluate the sample results, choose an end use and create and maintain a record by completing the required certification form.

(1) CERTIFICATION FORM. The sediment manager shall accurately and completely fill out and certify the applicable portions of the certification form supplied by the department.

(2) DRAINAGE AREA EVALUATION. The sediment manager shall certify in accordance with sub. (1) whether or not the drainage area meets all of the following criteria:

(a) Has less than 15 % commercial, multi-family residential, institutional and industrial land uses combined.

(b) Has no areas of suspected contamination that may adversely affect sediment management.

(c) Has no other existing conditions or known historical events that may adversely affect sediment management.

(d) Has no reported hazardous substance spills regulated under s. 292.11, Stats., since construction or since accumulated sediment was last removed.

(3) SAMPLING. If the drainage area does not meet the criteria in sub. (2), the sediment manager shall ensure that routine sampling is performed in accordance with par. (a), the results are analyzed in accordance with par. (b) and sampling and analysis is performed under the supervision of an environmental professional in accordance with par. (c). Samples shall be obtained each time prior to clean-out of the storm water management structure.

Note: If sampling has been performed previously and the drainage area has not changed significantly since the sediment was last tested, the previous sampling results may be used as provided in par. (a) 4.

(a) *Sample collection.* Representative accumulated sediment samples shall be obtained by meeting all of the following criteria:

1. Samples will be obtained using proper handling, storage and delivery procedures required by the laboratory where the samples will be analyzed.

2. Samples will be obtained that are representative of the entire volume of sediment to be removed and managed using the following:

a. One sample shall be obtained in each surface acre or portion of a surface acre in storm water management structures that are 4 acres or less.

b. At least one sample per quadrant shall be obtained when the storm water management structure is greater than 4 acres.

c. A greater number of samples shall be obtained when necessary to represent the variability in the sediment due to factors such as sediment transport within the structure, changes in land use in the drainage area and the duration of time during which the sediment has been accumulating.

d. Samples shall be taken to the depth of the anticipated sediment removal.

3. Samples will be obtained to provide a volume of sediment adequate to meet the analytical requirements based on the parameters to be analyzed for and the methods of analysis to be performed by the laboratory where the samples will be analyzed.

4. The sediment manager may forgo sampling and use previously collected data from samples taken at the same storm water management structure, if conditions in the drainage area have not changed significantly since the previous sediment sampling event.

(b) *Sample analysis.* Samples collected in par. (a) shall be analyzed at a laboratory certified in accordance with ch. NR 149 and tested for all of the following constituents:

1. Percent solids and percent organics and indicator parameters electrical conductivity as a saturated paste and pH.

2. Total Kjeldahl nitrogen, total nitrate nitrogen, total phosphorus and total potassium.

3. Total arsenic, cadmium, copper, chromium, lead, nickel, zinc as indicator parameters showing the potential presence of other heavy metals at elevated levels.

4. Fecal coliform as an indicator parameter showing the potential presence of other pathogens.

5. Additional parameters beyond those required under subds. 1. to 4. if deemed necessary by the sediment manager based on the following factors:
- a. The present and past land uses in the drainage area served by the storm water management structure such as commercial, multi-family residential, institutional and industrial.
 - b. Any other known or suspected sources of contamination.
 - c. Existing conditions or known historical events that may affect the likelihood of safe sediment management.
 - d. Reported hazardous substance spills under s. 292.11, Stats., in the drainage area since construction or since accumulated sediment was last removed.
 - e. Sample data indicating elevated levels of contaminants for indicator parameters in subds. 3. and 4. that may affect management in s. NR 528.05.
 - f. Any other applicable administrative code requirements.

(c) *Oversight.* Sample collection and evaluation pursuant to this subsection shall be performed by or under the supervision of a professional engineer registered pursuant to s. 443.04, Stats., or a professional soil scientist, geologist or hydrologist licensed under ch. 470, Stats.

(4) SEDIMENT SAMPLE DATA EVALUATION. The sediment manager shall ensure that the sediment sample data collected in accordance with sub. (3) (b) 1. to 4. are evaluated by an environmental professional in accordance with sub. (3) (c) and compared with the ceiling levels in s. NR 528.04 (4) Table 2 and, based on the results of the evaluation, the following steps are taken:

(a) If any of the ceiling levels in s. NR 528.04(4) Table 2 are exceeded, the accumulated sediment shall be disposed of in a licensed landfill.

(b) If the indicator parameter levels do not exceed the ceiling levels in s. NR 528.04(4) Table 2 but show elevated levels of contaminants, the sediment manager shall ensure that follow-up sampling is performed in accordance with sub. (3) (b) 5., results evaluated, an appropriate end use is determined in accordance with sub. (5) and the certification form supplied by the department is completed.

(c) If the indicator parameter levels do not indicate elevated levels of contaminants, the sediment manager shall ensure that an appropriate end use is determined in accordance with sub. (5) and the certification form supplied by the department is completed.

Note: The sediment manager may refer to technical support resources provided by the department to assist in evaluating the data when addressing elevated levels of contaminants.

(5) END USE DETERMINATION. The sediment manager shall determine the appropriate end use using the following steps:

(a) The sediment manager shall complete the appropriate sections of the certification form provided by the department and certify whether or not the drainage area from which the sediment is removed meets the criteria in sub. (2).

(b) If all the criteria in sub. (2) are met, the sediment manager is not required to sample the sediment or meet the locational criteria in s. NR 528.04 (1).

(c) If the criterion in sub. (2) (a) is not met, but the criteria in sub. (2) (b) to (d) are met, the sediment manager shall ensure that the sediment is sampled pursuant to sub. (3) and the appropriate sections of the certification form provided by the department are completed. If the sample data indicates elevated levels of contaminants, the sediment manager shall ensure that additional parameters are sampled for in accordance with sub. (3) (b) 5. and the appropriate sections of the certification form provided by the department are completed.

(d) If the criteria in sub. (2) (b), (c) or (d) are not met, the sediment manager shall ensure that sources of contamination in the drainage area are further evaluated, additional sampling is considered in accordance with sub. (3) (b) 5. and the appropriate sections of the certification form provided by the department are completed.

NR 528.07 End uses of accumulated sediment. The sediment manager may choose an end use for the accumulated sediment in accordance with this section.

(1) LICENSED LANDFILL DISPOSAL. (a) If the sediment manager determines that the accumulated sediment will be disposed of in a solid waste disposal facility licensed under ch. 289, Stats., the sediment does not need to be evaluated or sampled under s. NR 528.06.

Note: The landfill operator should be contacted to determine whether the landfill requires the sediment be sampled before it is accepted at the landfill. The sediment may be appropriate for use as daily or final cover in accordance with the landfill's approved plan of operation.

(b) If the sediment manager determines that any of the ceiling levels in s. NR 528.04 (4) Table 2 are exceeded, the accumulated sediment shall be disposed of in a licensed landfill.

(2) GENERAL FILL. (a) The accumulated sediment may be used as fill in a designed excavation or to improve a site by restoring original contours, filling depressions, improving or stabilizing borrow areas or other disturbed sites.

Note: Examples of uses may include reclamation of abandoned mines, construction or maintenance of non-department of transportation facilities or other uses that mitigate safety or erosion hazards or otherwise improve disturbed sites.

(b) The sediment manager shall take all of the following steps to stabilize the site:

1. Complete placement and preparation of the sediment and any needed topsoil, substitute soil or cover material within 6 months or less of initiating placement in the project year.

2. Stabilize the cover, topsoil, substitute soil or sediment to prevent erosion due to wind and water, perform all revegetation, mulching or other equivalent stabilization activities prior to the end of the growing season and minimize the exposure of the sediment to the environment by employing one or more of the following measures:

a. Place an impermeable cover.

b. Place a topsoil layer of no less than 6 inches.

c. Use the accumulated sediment in lieu of or in combination with topsoil, provided it is capable of supporting a vegetative cover.

3. Revegetate, mulch or otherwise stabilize the sediment within 48 hours of completing the sediment disposal.

(c) The sediment manager shall take measures to control erosion during and after the placement of sediment.

(3) CONFINED FILL. The accumulated sediment may be used as confined fill for a variety of uses such as geotechnical, subbase under paved lots, subbase or subgrade for building construction and utility trench backfill.

Note: Examples of confined fill uses may include construction and maintenance of non-department of transportation projects, bridge abutment backfill or other similar uses.

(4) LANDSPREADING. The sediment manager shall complete the appropriate sections of the certification form provided by the department and comply with the other requirements in s. NR 528.06. When landspreading the accumulated sediment, the following shall apply:

(a) *Site evaluation.* The site where the accumulated sediment is proposed to be landspread shall be evaluated to ensure that the site is suitable. The site evaluation shall include the soil factors in Table 3 and may include assessment of organic matter content, cation exchange capacity, soil permeability and any other characteristics or factors that would affect the mobility and attenuation of pollutants present in the sediment. The site shall meet the locational criteria in s. NR 528.04 (1) Table 1.

**Table 3
Soil factors for site evaluation**

Soil Factor ¹	Acceptability for landspreading accumulated sediment			
	Unacceptable	Poor	Adequate	Preferred
pH standard units	less than 5.3 or greater than 8.0	5.3 to 5.6 or 7.7 to 7.9	5.7 to 5.9 7.3 to 7.6	6.0 to 7.2
Texture		silty clay ² , clay ² , sand ³ , loamy sand ³	sandy loam, fine sandy loam, silty clay loam, sandy clay	loam, silt loam, silt, clay loam, sandy clay loam

¹ obtain from soil survey, not in-field test

² acceptable only when incorporated

³ acceptable only with increased site management

(b) *Application rate and depth.* The application rate of accumulated sediment may not exceed 5 dry tons per acre per year and may not exceed 15 dry tons per acre total loading during the life of the landspreading site. The depth of the application may not exceed 18 inches.

1. Neither the 5 dry tons per acre per year application rate limitation or the 15 dry tons per acre landspreading site life limit apply when accumulated sediment is used as a component of a marketable soil amendment product pursuant to a contract or used to facilitate nonmetallic mine reclamation as part of an approved reclamation plan.

2. The 5 dry tons per acre annual limit and the total loading limit of 15 dry tons per acre landspreading life may be adjusted based on soil sampling results, plant tissue monitoring data, landspreading site records or other data. The sediment manager shall collect and evaluate all necessary data to justify the exceedances and extended use and shall ensure that all data and records of site use and sediment applications are maintained for 20 years.

(c) *Nutrient content.* The sediment manager shall provide the nitrogen and phosphorous content to the receiver of the accumulated sediment if the receiver has a nutrient management plan for the acreage where the accumulated sediment will be landspread.

Note: Farmers required to follow a nutrient management plan need information on nutrient content in order to comply with NRCS Standard 590 available at: <http://efotg.nrcs.usda.gov/references/public/WI/590.pdf>.

(d) *Uniform application.* The application of accumulated sediment to the land surface shall be uniform when surface applied, as well as during injection or incorporation.

(e) *Application limitations.* Accumulated sediment may not be applied under any of the following situations:

1. On frozen or saturated ground.
2. When precipitation capable of producing runoff is forecast within 24 hours of the time of planned application, during or immediately after a precipitation event.
3. On slopes greater than 6 %.

(f) *Pathogens.* In all cases where a pathogen risk exists due to the presence of pathogens, as indicated by fecal coliform levels above 1,000 MPN per dry gram weight, the following management practices shall be implemented:

1. At a minimum, include the incorporation of accumulated sediment into the surface soil to a depth of at least 6 inches by disking or an equivalent process and may include other measures such as signage, restriction on site access or other appropriate measures.
2. The following waiting periods and access restrictions shall apply beginning on the date when the landspreading activity is completed:
 - a. When lands are used for the production of forage crops, landspreading shall occur only after harvest has occurred and before any new growth reaches 6 inches.
 - b. When lands are used for food crops intended for human consumption, a period of at least 14 months shall elapse prior to emergence of the food crop.
 - c. When lands are used for grazing, at least 30 days shall elapse prior to allowing access to non-dairy animals and at least 60 days shall elapse before allowing access to dairy animals.
 - d. When lands are subject to public access or used for the harvest of crops grown for fiber or any other forage or crop production, not covered in this subd. 2. a. to c., a period of at least 30 days shall elapse before the site may be accessed or used.

(5) DEDICATED SEDIMENT MANAGEMENT SITE. The end use of landspreading or sediment treatment at a dedicated management site may be chosen provided the sites are owned or leased by a municipality or other responsible unit of government. The sediment manager shall assume any additional site management, site monitoring and recordkeeping responsibilities that are necessary to minimize risk to the health and the environment.

(a) When sediment is used at a dedicated site, the sediment manager shall complete the appropriate portions of the certification form provided by the department. Based on the information obtained in accordance with s. NR 528.06, the sediment manager may choose to use the accumulated sediment for productive purposes including the growth of herbaceous or woody plants for harvest or for treatment to reduce contaminants in the accumulated sediment in accordance with this subsection.

(b) The following restrictions shall apply to dedicated sediment management sites:

1. The location criteria in s. NR 528.04 (1) shall be met.

2. The sediment shall be applied to a depth of 18 inches or less below ground surface.
3. When the dedicated site is used for sediment treatment so as to attenuate or reduce contaminants in the accumulated sediment, only non-food chain crops or woody plants for harvest or phyto-remediation purposes may be grown.
4. The annual application rate or lifetime loading limit in sub. (4) (b) may be adjusted provided the sediment manager follows safeguards provided for in sub. (4) (b) 2. and any additional measures or practices that may be necessary to ensure safe long-term site use. These may include practices such as the collection and evaluation of contaminants in soils, plant tissue, other environmental receptors or monitoring devices. The sediment manager shall track the sediment application rates and cumulative site loading totals for contaminants in soil or other receptors as appropriate. The sediment manager shall implement any additional measures that may be necessary such as enhanced site management practices to control run-on and runoff or erosion control practices. At a minimum, the erosion control requirements of s. NR 528.04 (3) shall be met.
5. Accumulated sediment may be applied on frozen ground and on slopes greater than 6 % or more provided the sediment management is performed in compliance with s. NR 528.04 (3) and adequate and permanent run-on and run-off controls are in place and maintained.
6. Sediment may not be applied when precipitation capable of producing runoff is forecast within 24 hours of the time of planned application, or during or immediately after a precipitation event.
7. In all cases where a pathogen risk exists due to the presence of pathogens, as indicated by fecal coliform levels above 1,000 MPN per dry gram weight the waiting periods in sub. (4) (f) apply.
8. In all cases where a pathogen risk exists due to the presence of pathogens, no grazing is allowed and no human food chain crops may be grown where the sediment has been applied.
9. In all cases where a pathogen risk exists, permanent public access controls shall be put in place and access restricted during any year when the sediment application occurs.

(c) The sediment manager shall file an affidavit indicating that the site was used for a dedicated sediment management site in the registrar of deeds office in the county where the site is located.

(d) The sediment manager shall ensure that all appropriate completed certification forms, all sediment sampling results and all monitoring data and site use and sediment loading records are retained during site operation and for 20 years after the site is closed.

(6) SMALL QUANTITY, COARSE GRAINED SEDIMENT DISPOSAL. The sediment manager may choose to manage certain kinds of coarse grained sediment as provided under this subsection.

(a) If the annual volume of accumulated sediment to be managed is 100 cubic yards or less and comprised primarily of coarse-grained material such as that found in the forebay, the sediment manager shall complete the appropriate sections of the certification form provided by the department and indicate the following criteria are met:

1. The volume of accumulated sediment to be managed is 100 cubic yards or less.
2. No more than 15 % of the material, as a percentage by weight, passes a No. 200 sieve.

(b) If the criteria in par. (a) are met, no chemical testing is required and the sediment shall be managed in accordance with s. NR 528.04 (1) and (2). If either par. (a) 1. or 2. are not

met, the accumulated sediment may not be used in accordance with this subsection and shall be managed in accordance with ss. NR 528.04 to 528.07 (5), 528.07(7) and 528.08.

(c) The sediment manager shall maintain responsibility for the disposal of the accumulated sediment.

(d) The sediment manager shall retain records in accordance with s. NR 528.08.

(7) END USE UNDER OTHER CONTROL. Accumulated sediment may be used under the control of another program in accordance with this subsection. End use of accumulated sediment pursuant to this subsection is not subject to the other provisions of this chapter provided equivalent protectiveness is afforded, including the provisions of s. NR 528.04 (2) to (4).

(a) Accumulated sediment may be used in accordance with a Wisconsin department of transportation facility construction and maintenance project contract of specific duration that requires compliance with Wisconsin department of transportation standard specifications for site restoration and stabilization. Sampling in accordance with s. NR 528.06 (3) is not required when there is another requirement such as a contract or permit that requires sampling encompassing the s. NR 528.06 (3) requirements. Sampling pursuant to s. NR 528.06 (3) shall be performed if the contract or permit does not require sampling encompassing these requirements.

Note: The requirements of the WDOT concerning the restoration of disturbed sites are found in sections of the standard specifications including those addressing erosion control, seeding, final clean-up and may be found in: WDOT Standard Specifications, see <http://roadwaystandards.dot.wi.gov/standards/stdnspec/index.htm>

(b) Accumulated sediment may be used in accordance with a ch. NR 135 nonmetallic mine reclamation permit issued pursuant to an applicable nonmetallic mining reclamation ordinance. Sampling in accordance with s. NR 528.06 (3) is not required when there is another document such as a contract or permit that requires sampling encompassing the s. NR 528.06 (3) requirements. Sampling pursuant to s. NR 528.06 (3) shall be performed if the contract or permit does not require sampling encompassing these requirements.

NR 528.08 Record retention. All completed certification forms, all sediment sampling results, other site monitoring results and site management records shall be retained by the sediment manager for 20 years.

NR 528.09 Department assistance. To assist sediment managers in making the determinations required in this chapter, the department may provide outreach, training, certification forms, written and on-line technical assistance documents or other resources deemed appropriate.

NR 528.10 Sediment management program evaluation and compliance. The department may consult and work with those who implement accumulated sediment uses and are interested in substantiating the effectiveness, safety and environmental protectiveness of the chosen sediment management practice. Sediment managers shall provide data documenting their operation to assist with the evaluation upon request by the department. The department may also request information necessary to determine compliance with this rule. Sediment managers shall provide site access to department staff upon request.

SECTION 3. EFFECTIVE DATE. The rule shall take effect the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22(2)(intro.), Stats.

SECTION 4. BOARD ADOPTION. The rule was approved and adopted by the State of Wisconsin Natural Resources Board on _____.

Dated at Madison, Wisconsin _____

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By _____
Matthew J. Frank, Secretary

(SEAL)