

## **Report From Agency**

### REPORT TO LEGISLATURE

NR 528, Wis. Adm. Code  
Management of Accumulated Sediment from Storm Water Management Structures

Board Order Number WA-22-08  
Clearinghouse Rule Number 08-111

### **BASIS AND PURPOSE OF THE PROPOSED RULE**

The Department does not currently have rules with specific requirements for handling the removal and disposal of sediment from storm water sedimentation basins. However, as the result of recent revisions to the Clean Water Act, for which the Department has delegated authority, there is an increasing number of storm water structures and corresponding growth in the volume of sediment to manage. After the sediment is removed from a sedimentation pond, it is a solid waste regulated under Ch. 289, Stats. Currently, the Department performs case-by-case evaluations in response to requests for an exemption to dispose of the sediment.

The proposed rule provides an innovative and proactive approach to managing the sediment. It provides a risk-based regulatory framework that allows self-regulation. The rule employs a certification form for the person responsible for managing the sediment to certify their qualifications to determine an appropriate end use, document the process followed to make the decision and attest that proper implementation of the end use will be protective of public health and the environment. In most cases the Department's direct involvement would be minimal, allowing staff to concentrate resources on higher priority waste materials.

### **SUMMARY OF PUBLIC COMMENTS**

Written comments were received from Broydrick & Associates, City of Madison, City of Wausau, Davy Engineering Company, Municipal Environmental Group/League of Wisconsin Municipalities, Natural Resources Technology, State Laboratory of Hygiene, TestAmerica, Wisconsin Builders Association, a Natural Resources Board member and the Wisconsin Legislative Council Rules Clearinghouse.

Broydrick and Associates supports the plan to create a self-implementing procedure for managing sediment accumulating in storm water structures but suggested we require more testing. Municipal Environmental Group/League of Wisconsin Municipalities believes NR 528 is a positive step toward streamlining the management of accumulated sediment in a cost effective manner but suggested we require less testing. The Department believes the amount of testing required in the rule is a good balance between these two stands.

The City of Wausau suggested the Department include exceptions to the rule but the Department believes this would significantly increase the Department's role in determining the best end use for the sediment and one of our purposes was to reduce our role. Davy Engineering was concerned that some sediment managers would not be qualified to make the decisions required in the rule. The Department believes that this will not be a problem as an environmental professional must sign the certification form indicating they are qualified to determine an appropriate end use that will be protective of public health, welfare and the environment in most cases before the end use is implemented. The City of Madison suggested the Department change the setback from navigable waters and the Department has changed the setback to be more consistent with other Department codes. Natural Resources Technology (NRT) suggested the Department use a comprehensive risk-based determination of clean-up requirements being considered by the Department's Remediation and Redevelopment program instead of the ceiling

levels. It will be some time before the Remediation and Redevelopment program establishes the clean-up requirements, referenced by NRT and using accumulated sediment is different from cleaning up contaminated soil at Brownfield sites.

TestAmerica and the State Laboratory of Hygiene suggested specific language changes related to parameters and sampling to clarify our intent. The Department incorporated most of their suggestions. One of the Natural Resources Board members asked the Department to consider accepting the documentation electronically rather than requiring the information be retained for 20 years. The Department added rule language to allow this in the future after we have developed the capability to accept data from the forms electronically.

Specific comments and the Department's responses are provided in attached Appendix A - Department of Natural Resources Response to Comments Received on Proposed NR 528 Board Order Number WA-22-08.

### **MODIFICATIONS MADE**

Modifications made by the Department are detailed in attached Appendix A.

### **APPEARANCES AT THE PUBLIC HEARING**

The Department held public hearings on February 11 and 12, 2009, at the Marathon County Public Library located at 300 N. 1<sup>st</sup> Street in Wausau and the State Natural Resources Building (GEF 2) located at 101 South Webster Street in Madison. The following appeared as indicated below:

In support:                               Representing River Alliance of Wisconsin: Lori Grant, 306 E. Wilson St. Suite 200, Madison, WI 53705  
Representing City of Madison Engineering, Greg Fries, Room 115 210 Marin Luther King Jr. Blvd., Madison, WI 53703  
Representing City of Superior – ESDPW: Kevin Russeth City of Superior – ESDPW 51 E 1<sup>st</sup> St., Superior, WI 54880 (Mr. Russeth checked both “In support” and “As interest may appear” on the Hearing Appearance Form)

In opposition:                           None

As interest may appear: Eric Nitschke (no address provided)  
Representing the City of Wausau: Allen Wesolowski, 407 Grant Street, Wausau, WI 54403  
Representing REI Engineering: Alan Farrell, 4080 N. 20<sup>th</sup> Ave., Wausau, WI 54401  
Representing REI Engineering: Andrew Delforge, 4080 N. 20<sup>th</sup> Ave., Wausau, WI 54401  
Representing Municipal Environmental Group: Julie Baldwin, 1 N. Pinckney St. Suite 200, Madison, WI 53703  
Representing Wisconsin Builders Association: Pat Stevens, 4868 High Crossing Blvd., Madison, WI 53704  
Representing Dairyland Power Cooperative: Michael Peters, 3200 East Ave. South, LaCrosse, WI 54601  
Representing City of Superior – ESDPW: Kevin Russeth City of Superior – ESDPW 51 E 1<sup>st</sup> St., Superior, WI 54880 (Mr. Russeth checked both “In support” and “As interest may appear” on the Hearing Appearance Form)

## **CHANGES TO RULE ANALYSIS AND FISCAL ESTIMATE**

Modifications made by the Department are detailed in attached Appendix A.

The fiscal effect remains the same, and no changes were made to the fiscal estimate.

## **RESPONSE TO LEGISLATIVE COUNCIL RULES CLEARINGHOUSE REPORT**

All Clearinghouse comments have been accepted and the rule revised accordingly, except for Clearinghouse comment 5.f. This comment stated, “the phrase, ‘under the supervision of an environmental professional’ is confusing and should be deleted.” The Department eliminated the confusion by adding a definition of “environmental professional” to the rule language.

## **FINAL REGULATORY FLEXIBILITY ANALYSIS**

The proposed rule will not have a significant economic impact on a substantial number of small businesses. Under existing rules, a sediment manager, when cleaning out a storm water management structure, must either pay the price of taking the sediment to a licensed landfill or pay for the Department to review an exemption request. Under the proposed rule, the sediment manager still has the option to take the sediment to a landfill or choose a different end use, often at a reduced cost. If the basin from which the sediment is derived meets certain criteria, the sediment does not need to be sampled and tested prior to determining the appropriate end use, allowing for significant savings. If the basin does not pass the criteria, the sediment must be sampled and analyzed prior to selecting an end use. The cost in this case would be similar or less than that under the existing rule. The list of sampling parameters is usually shorter under the new rule and a fee to have an exemption reviewed is not charged.

## Appendix A

### Department of Natural Resources Response to Comments Received on Proposed NR 528 Board Order Number WA-22-08

#### General support for NR 528 support and appreciation of Department efforts

1. COMMENT: The City of Wausau (CWAU<sup>1</sup>) (oral comment) indicated that it supports the proposed rule and appreciates having alternatives for use of the sediment besides taking it to a landfill. The rule should save the city money. Similar support was expressed by (MEG/LWM) who stated that, in general, proposed NR 528 is a positive step forward in the management of accumulated sediment removed from stormwater structures. It is critical that the rule facilitate and encourage the maintenance of stormwater ponds in a cost effective manner and to provide disposal options other than landfilling.

1.1 COMMENT: Patrick Stevens (WBA) (oral comment) indicated that he and his stakeholders-WBA would like to go on record in support of most of the proposed changes to NR 528 “... we would like to thank the Department of Natural Resources for providing us with an opportunity to serve on the technical advisory committee that worked on this rule proposal. WBA appreciates the Department’s willingness to undertake extensive, open, constructive dialogue with the members of the Technical Advisory Committee to develop this rule. We (WBA) commend the Department staff for their efforts on this matter.” Similar statements were expressed at the Madison hearing (oral comment) by Lori Grant on behalf of (RAW). Ms. Grant said that the rule development took into consideration the bulk of the concerns the Technical Advisory Committee had.

RESPONSE: The Department appreciates the support received from and the perspective provided by the Technical Advisory Committee (TAC) members and looks forward to consulting with the TAC and others while developing technical support materials to assist in implementing the rule.

#### Complexity of NR 528 and need to develop support materials to make as understandable as possible

2. COMMENT: Lori Grant’s (oral comment) main concern was to make sure that the proposed rule encourages storm water managers to maintain their ponds, to ensure that surface water protection is as streamlined as possible and to encourage people to manage their ponds adequately so they function as intended in protecting the waters of the state. She indicated that the proposed sediment management rule has achieved a balance between protecting the environment and assuring the ponds are managed properly. However, she remains concerned that the rule has become more complex and desires an accompanying guide document that puts things in layman’s terms. (RAW)

RESPONSE: The Department understands this issue and continues to work to make the rule and associated certification form as easy to understand and use as possible. The Department will also attempt to make the rule requirements more clear through the use of an on-line technical guide document. The Department looks forward to working in partnership with the Technical Advisory Committee in developing the on-line technical support materials.

2.1 COMMENT: For ponds in relatively large communities, there should be someone on staff who is qualified to make the types of judgments and evaluations that are necessary. But for smaller communities where there is one maintenance person who may or may not have a High School

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<sup>1</sup> Please see table at end of document for key to acronyms.

education or may not understand environmental, chemical, water quality issues, it might be a problem. There seems to be a leap of faith that all sediment managers will possess the necessary background. (DECO)

RESPONSE: The Department, with the advice of the Technical Advisory Committee, has used the certification form to provide both credibility and accountability in sediment management. The certification form requires, except in the case of “clean” sediment, that the person signing must be qualified and must have a professional license or registration.

#### Related to applicability, clarifying notes

3. COMMENT: In several places NRT recommends the addition of a reference to s. 30.20, stats. relating to removal of material from beds of navigable waters, to make it clear the NR 528 rules do not apply to dredging of navigable waters and that the code has specific applicability to managing sediment derived only from storm water management structures. As such, we recommend enhancing the applicability section to clarify that it is not applicable to remediation projects for sediment derived from other surface waters of the state (e.g., rivers, lakes, streams). Concern is that there is too much potential for readers to miss these important stated facts. (NRT)

RESPONSE: The Department has added language in NR 528.02 (3)(b) (Applicability) to make it clear that the rule does not apply to material removed from beds of navigable waters.

3.1 COMMENT: This provision (NR 528.02 (2) (c), Applicability) indicates that chapter NR 528 would not apply to the disposal of hazardous waste. The language implies that some sediment may be considered hazardous waste. The Department should clarify that accumulated sediment is not a hazardous waste. (WBA)

RESPONSE: It is beyond the scope of the proposed rule and there are statutory obstacles that limit the authority of Department staff to make any assertions regarding whether or not accumulated sediment could, in some instances, be a hazardous waste. However, based on available sediment data and EPA sources the Department believes that the sediment will rarely, if ever, be hazardous. The Department has added a note to this effect under “Applicability” and will provide appropriate information in its forthcoming technical guide document.

3.2 COMMENT: The proposed rule does not provide for an appeals process to allow for exceptions to the rule. I would recommend allowing the Sediment Manager to be able to apply for an exception to the rule if certain parts of the rule cannot be met. It would allow for the sediment manager to apply to the Department for review if all criteria cannot be met. (CWAU)

RESPONSE: The intent of the rule is to allow the sediment manager to make evaluations and decisions with little DNR input and it is implicit that case-by-case determinations would increase Department oversight and would be contrary to the streamlining philosophy of the rule.

#### Related to definitions

4. COMMENT: Under the definition of storm water management structure in NR 528.03(11) the language detains, retains and treats is unclear. A system that retains water would seem to preclude dry detention ponds but they are included in the following sentence. Perhaps it would be clearer to define these as ponds that detain or retain storm water for treatment. (MEG/LWM)

RESPONSE: Agreed. We have revised the definition to make it clear that these are treatment devices that may achieve sediment reduction while detaining or retaining storm water.

4.1 COMMENT: We support the concept of NR 528.06 that gives a limited form of exemption to sediment from those areas where we have a high degree of confidence that the material is clean. However, NR 528.06(2)(a) is too restrictive in several respects. First, benign open space uses of

land which have the potential to be categorized as institutional such as cemeteries and parks or similar spaces that could be categorized as commercial, such as golf courses, should be exempt from contributing to the percentage limit. This could be accomplished by adding a “residential and open space” definition to NR 528.06(2)(a) or by specifically exempting them in NR 528.06(2)(a). Second we also think that the concept of residential should include at least some family and residential uses. Again a definition would be able to address this issue. (MEG/LWM)

RESPONSE: While the certification form clarifies that open space and cemeteries would be treated as benign source areas, the rule language did not include that concept. The certification form also separates one and two family dwellings from multi-family residential and this may not be clear in the rule. As suggested, the solution is to add definitions. We have added definitions for multi-family, institutional, industrial and commercial and clarified the rule language to exclude green space such as parks, cemeteries and golf courses.

4.2 COMMENT: Would like the definition of single family and multi-family clarified. The rule is confusing and would benefit from being simplified. DNR should expand NR 528.06(2)(a) so that more drainage areas would fall within these criteria. DNR should increase the percentage of non-residential allowed to fall within this provision. Moreover, DNR should eliminate “multi-family residential” from the combined uses that must total less than 15%. In addition, “multi-family residential” needs to be defined. Typically, one and two family dwellings are not considered multi-family. (WBA)

RESPONSE: See response to comment 4.1 above about definitions. As to the request for an expansion of NR 528.06(2)(a), the land uses identified under the 15% are considered higher risk land uses because of the higher pollutant loads associated with them. These land uses also tend to have higher percentages of connected impervious surfaces so the pollutant load from those sources (for example parking lots and roads) will reach the pond. These areas could have been excluded completely, but the decision was to allow up to 15% of these land uses. The Department has also excluded green spaces so as not to be too restrictive. Multi-family land use typically has a high percentage of parking lots and they are usually connected to the storm sewer. The risk from this land use is higher than for one and two family dwellings. The Department believes it is appropriate to continue to include them in the 15% cutoff.

4.3 COMMENT: NR 528.03 (11): Clarify whether the definition is meant to be inclusive of structures within a conveyance system (e.g., manholes) that primarily serve to collect/discharge storm water (versus detention, retention or treatment). NR 528.02 (3)(a): How then are these devices and accumulated materials regulated, or are they not regulated under solid waste rules? (NRT)

RESPONSE: We have clarified the definition to include devices that treat, rather than convey, storm water. However there is a category of devices that are built into a conveyance system such as catch basin sumps and underground structures and these are not included in this code. The Applicability section and the definition of storm water management structures have been modified to clarify that point. As a result, sediment that accumulates in these structures will continue to be subject to the solid waste rules and cannot be handled using the procedure identified in NR 528.

#### Related to locational criteria/setbacks and end use

5. COMMENT: The Department should reconsider some of the separation distances contained in Table 1. For example, the 500 foot separation distance for wetlands seems unnecessarily restrictive. In reference to Table 1, it is difficult to stay 500 feet back from a residence if you're in the city. (CMAD) Suggestions included requiring a 100 foot setback from the lot line as an alternative. (Oral comment - CWAU). Similarly, we question whether there is a need for the distance restrictions for health care facilities. (WBA)

5.1 COMMENT: We have two sets of concerns on the locational criteria. First, the exemptions from the locational criteria in NR 528 are too narrow. Second we believe that the 500 foot separation distance from lake, wetland, pond or any navigable waterway or sinkhole is too high. Setbacks for construction and fills are much less under shoreland zoning in NR 115 and stormwater management protective zones in NR 115.21. Again the performance standards under NR 528.04(2) still need to be met so the resource will be protected. However 500 feet around any stream or wetland will substantially limit the placement of otherwise acceptable fill in many locations. We would recommend that this be made consistent with NR 151 separation distances. (MEG/LWM)

RESPONSE to 5.0 and 5.1: The Department agrees that the 500 foot setback to a waterway or water body contained in Table 1 may safely be reduced and has revised the rule by reducing the setback in Table 1 from 500 feet to 200 feet. The Department also agrees that the separation to a residence may be safely reduced from 500 feet to 250 feet and has revised Table 1 accordingly. The risk and aesthetic considerations are similar to those addressed in ch. NR 502 which requires a 250 foot setback from "... land owned by a person other than the owner or operator of the facility ...". In addition, the footnote to Table 1 in NR 528.04 has been modified to allow a reduced setback from schools and health care facilities provided the pathogen levels are below a specific threshold. Further, the rule already provides an exemption from the locational criteria for "clean" accumulated sediment – sediment that meets the criteria in NR 528.06 (2); sediment used in a confined fill; and sediment managed under the jurisdiction of another authority.

5.2 COMMENT: The note to the "General Fill" section indicates that these are the same kinds of projects such as roads and abandonment of mines that are in NR 528.07(3) and (7). In addition these areas are still protected because the disposal will need to meet the performance standards under NR 528. (MEG/LWM)

RESPONSE: The Department has revised the notes that appear under both "General Fill" and "Confined Fill" to make them clearer and eliminate confusion. The Department has also changed the use of the term "confined fill" throughout the rule to "confined geotechnical fill" to be consistent with the definition used in NR 538 Beneficial Use of Industrial Byproducts. The definition of "Confined geotechnical fill" has been changed to reference NR 538 and a note added to indicate what the definition says.

5.3 COMMENT: We believe that general fill should be exempt from the location criteria given that the material is below the ceiling levels contained in 528.04 (4). (WBA)

RESPONSE: The Department believes it is not appropriate to waive locational criteria for general fill because the site may be opened up for an entire growing season or for a maximum of six months and therefore may be subject to air and water erosion risks or become a nuisance to nearby landowners due to fugitive dust. The Department agrees that the setbacks contained in Table 1 are not necessary in all cases and makes distinctions based upon risk management. For instance, sediment deemed clean by virtue of passing the criteria in NR 528.06 (2) are not subject to the locational criteria. Likewise, sediment used in a confined fill as under NR 528.07(3) is exempt from the locational criteria.

#### Related to laboratory certification and registration

6. COMMENT: Can a lab be registered to perform the testing specified in NR 528.06(3)(b) ...or is certification specifically being required? (SLH) What about our concern that certified or registered labs could be performing the analyses in question? Under Stat. 299.11 (8), a registered lab is limited to doing analysis solely on its own behalf, on behalf of a subsidiary or other corporation under common ownership, or behalf of the municipality or municipalities under which it is controlled. Does the proposed code grant greater leeway than that allowed by Statute? (TA)

6.1 COMMENT: Do all the parameters listed in NR 528.06(3)(b)1-5 need to be performed by a certified (or registered) lab? Or will some of these analyses be exempt from the certification (registration) requirement? (SLH)

6.2 COMMENT: NR 528.06 (3) (b) 2. – The leaching process associated with landspreading would not result in as efficient of leaching of the nitrogen, phosphorus, or potassium as the required sample preparation procedures followed by environmental laboratories. This type of testing (the determination of nutrients for landspreading) is generally performed by soils testing laboratories who are not required to be certified under NR 149. That constituency may need to be brought into his discussion, or the techniques they follow may need to be introduced to the environmental lab community. (TA)

RESPONSE to comment numbers 6, 6.1 and 6.2: The Department believes it is appropriate to allow registered as well as certified labs to analyze sediment samples for parameters such as heavy metals, priority pollutants and other organic pollutants. However, the Department believes there are some parameters for which it is not necessary to require a registered or certified lab such as physical parameters, nutrients, pH, soluble salts and pathogens. The Department has modified the rule to make it clear which parameters are and are not required to be sampled by a registered or certified lab.

Related to sediment evaluation - sampling, and collection procedures, parameters, analysis and expression of results

7. Oral COMMENT: Questions the need to sample for nitrogen and phosphorous if the sediment is going to be used for fill and these parameters are not listed in Table 2. Department should consider not requiring these tests if the sediment is planned to be used as fill. (CWAU)

RESPONSE: Because in cases such as a general fill there may be concerns relative to groundwater or fugitive dust the Department believes the existing parameter list is appropriate.

7.1 COMMENT: We support the Department's plan to create a self-implementing procedure for managing sediment from stormwater structures. Reduced Department oversight makes it all the more important, however, that the state continue to require adequate testing of sediments. (BA)

RESPONSE: The Department agrees but is of the opinion the existing testing paradigm is cost effective and flexible enough to support a risk-based self implementing program.

7.2 COMMENT: NR 528.06 provides that no sediment sampling is required prior to landspreading sediment from a drainage area that has less than 15% commercial, multi-family, institutional or industrial land uses. As a result, sediments that have the greatest probability of contamination will be eligible for landspreading without testing solely because they derive from structures that also serve residential or agricultural properties. Testing should be required for sediment from any structure serving an industrial land use and for some commercial land uses including gas stations, automotive repair facilities, oil change businesses, and transportation related facilities including roadways. (BA)

RESPONSE: The Department has chosen to employ a percentage of land use falling under the categories of open space and residential area as a 'clean sediment' threshold. The basis for this threshold is that sediment generated from a drainage area meeting the criteria will be low in contaminants provided there are no unusual circumstances, historical spills or other historical reason for unusual levels of contamination. However, should that threshold be exceeded, or if there are historical land use factors that increase the risk, then the rule requires both sediment sampling and professional evaluation and certification on a form provided by the Department. While it may be possible for sediment that is generated in areas that are below the land use threshold to have unexpectedly high levels of contamination, as indicated above, NR 528.05 and

NR 528.06 require appropriate evaluations to ascertain the risk and this process is documented on the certification form required under NR 528.06(4).

7.3 COMMENT: NR 528.06(3)(a)2. requires only one sample for ponds of fewer than four acres. Particle size, however, will determine where sediment accumulates. To ensure a representative sample, four samples should be taken and a composite submitted for lab analysis. (BA)

RESPONSE: The Department agrees with the need to obtain a representative sample. The intent of NR 528.06(3)(a)2.c. is to require more than one sample to represent the variability in the sediment. To make this clearer in NR 528.06(3)(a)2.a. the Department has added language indicating it may require multiple samples composited together to obtain a representative sample. To help determine the appropriate number of samples, the Department has added a note and a link in NR 528.06(3)(a) referring to a comprehensive EPA guidance document on sampling sediment and similar materials. This will also be provided in the on-line technical guide the Department plans to develop to facilitate implementing the rule.

7.4 COMMENT: For purposes of clarity we would recommend that NR 528.06(3)(a)4. be incorporated in the preamble of that section rather than a note and a provision in the next section. The section could read: "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. b and sampling and analysis is performed under the supervision of an environmental professional in accordance with par. c unless conditions in the drainage area have not changed significantly since the previous sediment sampling event in which case previously collected data from the same storm water management structure may be used. (MEG/LWM)

RESPONSE: The Department substantially agrees with the comment and has modified the rule language accordingly and eliminated the note.

#### Related to parameters and analysis – Salts

8. COMMENT: When seeking the best parameter to evaluate the risk, if any, inherent to the salt content of the sediment, as proposed in NR 528.06(3)(b)1, is electrical conductivity the best measurement. Is there another better or more appropriate way to identify the testing required? Also, NR 528.06(3)(b)1, lists "electrical conductivity as a saturated paste" - is this the same as "Specific conductance" under ch. NR 219? (SLH) (TA)

8.1 COMMENT: In 528.04 (4) Table 2, isn't "dS/m" (deciSiemens/meter) the currently recognized unit of measure for reporting specific conductance? 1 mmho/cm = 1 dS/m. (SLH)

RESPONSE to comment numbers 8 and 8.1: The Department has kept electrical conductivity (EC) as a saturated paste because a likely use for the sediment is in an agronomic environment. EC tests are likely to be run by experienced agricultural laboratories and EC is most familiar to agricultural laboratories ascertaining salt content to ensure it has no detrimental effect on crops or other vegetation. The Department agrees that EC results would more appropriately be expressed as deciSiemens/meter (dS/m) and has revised the code accordingly.

#### Related to parameters, analysis and reporting

9. COMMENT: NR 528.06(3)(b)1: Clarify that "percent organics" means total organic carbon, or does it mean percent organics by the loss-on-ignition test? (NRT) (TA)

9.1 COMMENT: In NR 528.06(3)(b)1, could you be more specific with what testing is required to determine "percent organics"? Are you referring to the determination of "organic matter", using a method such as the Walkley-Black procedure (oxidation of matter with potassium dichromate and

then determine the amount of un-reduced dichromate by titration with ferrous ammonium sulfate followed by application of a conversion factor)? Or is percent volatile solids a satisfactory alternative? (SLH)

9.2 COMMENT: NR 528.06(3)(b)2. – Define the reporting units for total Kjeldahl nitrogen, total nitrate nitrogen, total phosphorous and total potassium. Do you report as % or mg/kg? Is this on a dry weight basis?

9.3 COMMENT: Are the ceiling levels identified in NR 528.04 (4) and results associated with testing performed under NR 528.06(3)(b) required to be reported on a dry weight basis? (SLH)

RESPONSE to comment numbers 9.0, 9.1, 9.2, and 9.3. The Department agrees and has revised NR 528.06(3)(b)1. and NR 528.06(3)(b)2. in the proposed rule to make it clear that the above parameters are to be reported as mg/kg on a dry weight basis. Similar Department programs and administrative codes that regulate wastewater sludge, (Chapters NR 204 and NR 214) refer to ch. NR 219. This code provides approved analytical procedures for the parameters required by proposed ch. NR 528 as well as for sample handling and preservation techniques. The above-cited administrative codes require that methods documented in chapter NR 219 be employed. In addition, the Department recommends consulting the procedures employed by the University of Wisconsin Soil and Plant Analysis Laboratory for tests that are agricultural in nature. These procedures are available at: <http://uwlab.soils.wisc.edu/madison/index.htm?../fees.htm&contents.asp?menu=1>. As stated elsewhere, the Department will provide links to these and other sampling and analytical references in forthcoming technical support materials.

#### Related to parameters and analysis – Fecals

10. COMMENT: NR 528.04 (1) and NR 528.06(3)(b)1. both refer to enumeration of fecal coliform, yet the EPA and many states are switching (or have switched) to the enumeration of E. coli as the indicator organism for pathogens. Should these citations reference back to NR 204.06 (2)(b)4. or NR 204.07(6) to facilitate updates in the event the agency moves towards something other than fecal coliform as a key indicator of pathogens? (SLH)

RESPONSE: The Department agrees it would be helpful to reference NR 204.06 (2)(b)4. and NR 204.07(6) to clarify the pathogen indicator test and allow for future decisions regarding the use of a better pathogen indicator that become codified to be “automatically” incorporated into NR 528. The rule has been revised to reflect this including a citation to NR 204.

10.1 COMMENT: In proposed NR 528.04 Table 1 and in proposed NR 528.07 (4) (f), fecal coliform levels are expressed as 1,000 MPN per dry gram weight - would it be more accurate to express this, as it is done in NR 204.07 Table 5, as "fecal coliform colony densities equal to or less than 1,000 MPN per gram total solids"? (SLH)

RESPONSE: The Department agrees and has changed the language to refer to the pathogen indicator organism testing in NR 204.07(6). Currently the testing requires “fecal coliform density equal to or less than 1,000 most probable number (MPN) per gram total solids on a dry weight basis,” but because the testing in NR 204.07(6) may change over time the Department refers to the section of the rule, not the specific test.

10.2 COMMENT: NR 528.08 (3) (b) 4. Fecal coliform analysis is not currently certified under NR 149, nor any other Code. (TA)

RESPONSE: The Department has modified the rule language so analyzing the sediment for the pathogen indicator organism is not required to be performed at a certified or registered laboratory.

Related to use and interpretation of parameters (indicator, elevated and ceiling levels) and technical support - assistance

11. COMMENT: NR 528.06(3)(b) omits sampling for PAH, mercury, oil & grease, TOC, PCB, and pesticides, all testing which has historically been required. Given the prevalence of petroleum-related contamination, these parameters should continue to be evaluated and used to determine whether a sediment can be safely placed into the environment through landspreading or other alternatives. (BA)

11.1 COMMENT: NR 528.06(3)(b) establishes various indicator parameters but has used them inefficiently. There should be a two-phased analysis approach with the first phase including analyzing only the indicator parameters electrical conductivity, pH and fecal coliform. It is our understanding that it is unlikely that a sample would contain metals without resulting in a measure of electrical conductivity. If so, further metals analysis could be done if there is an exceedance of the electrical conductivity parameter. In addition, as we have noted above, there should be an addition to Table 2 to give meaning to an “elevated level” under NR 528.06 (4)(b). (MEG/LWM).

11.2 COMMENT: The statement “elevated levels of contaminants” as used in NR 528.06(4)(b) and NR 528.06(5)(c): is subject to variable interpretation and needs to be clarified. Explain the meaning of “elevated levels of contaminants.” (NRT). Add information to give meaning to what “elevated level” means under NR 528.06(4)(b). (MEG/LWM)

RESPONSE to comments 11.0, 11.1 and 11.2: The Department believes the proposed approach, based on discussions with the Technical Advisory Committee (TAC), is preferable. The parameter list is very similar to that used in other Department codes that address similar needs both in terms of how it is organized and with respect to the list of required parameters. These other Department codes that address similar needs include chapters NR 518, NR 204 and NR 214. Further, the Department believes that the streamlined approach developed in consultation with the TAC is, in effect, a “two-phased program”. The proposed rule attempts to minimize the cost of obtaining data through the use of an abbreviated list of indicator parameters. The rule employs a screening process to determine if additional data are needed. This process allows the flexibility to gather the necessary data, in the context of risk management, and yet to avoid gathering unnecessary data. NR 528.06(3)(b)5. addresses the need in some circumstances to test for additional parameters such as polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), mercury, pesticides, etc. In addition, the Department has added language to NR 528.06(3)(b)5.e. to better define, “elevated levels of contaminants” by indicating that “elevated” means concentrations significantly above background. This language clarifies that simply finding a “detect” would not constitute an “elevated level.” The Department, in working with the TAC, has acknowledged the need to provide on-line technical support resources to supplement the code language. The Department has formalized this in proposed rule language under NR 528.09 Department Assistance. In addition, the note placed under NR 528.06 (4) specifically indicates the technical support resources are intended “to assist in evaluating the data when addressing elevated levels of contaminants.” The Department intends to develop these technical support resources with input from the TAC and others.

11.3 COMMENT: NR 528.04(4): While using ceiling levels as a screening tool for sediments that must be landfilled allows a cost effective and streamlined materials management process, it has potential to require landfilling of materials that can be otherwise managed in an environmentally sound manner. The Department is currently reviewing potential revisions to NR 720 to eliminate a short list of constituents and move toward a more comprehensive risk-based determination of clean-up requirements. Rather than promulgating absolute ceiling levels, can there be a process established that is consistent with direction being considered for soil management decisions under the NR 700 process? (NRT)

RESPONSE: The Department believes the ceiling levels used in the proposed rule are appropriate for this rule application. Due to the limited scope of the rule (streamlining our existing

process), as approved by the Natural Resources Board (NRB), it would not be appropriate to develop the comprehensive risk-based determination such as the approach being considered by the Remediation and Redevelopment (R&R) program. Further, the specific approach being considered by the R&R program is still in the development stage. In the future after an approach has been finalized and if the NRB approved expanding the scope of this proposed rule, the Department could consider incorporating an R&R type risk-based approach.

Related to record keeping and liability

12. COMMENT: Why are we not making on-line reporting a part of the rule? On-line reporting would relieve the reporter from keeping the record for 20 years. (NRB)

RESPONSE: The Waste and Materials Management program is not currently capable of accepting on-line reporting for this application but will include this as part of our current multi-year project to integrate our information technology applications into a "program-wide" system. To accommodate the future ability to accept the information on-line, the Department has added language to the rule allowing the establishment of an on-line system which would in-turn allow the sediment manager to submit the information on-line rather than retaining it for 20 years.

12.1 COMMENT: Would a sediment manager be liable for the mismanagement of sediment disposal for 20 years (or in perpetuity)? If records need only be retained for 20 years, shouldn't there be some sort of liability cap as well? (DECO)

RESPONSE: There is no connection between the period of record retention and liability. There would be no limitation on liability except as provided for in existing law. However, this proposed rule, in NR 528.08, does require a 20 year retention period for forms and records.

Related to sediment uses such as dedicated sites, landspreading and loading rates

13. COMMENT: While municipalities may not undertake landspreading often they might use dedicated sites. NR 528.07(5)(b)(4) sets the annual application rate or lifetime loading limit for a dedicated sediment management site at the same limit for Landspreading, NR 528.07(4)(b). Five dry tons an acre is a very thin application rate. If one dry ton equals one cubic yard then the loading rate per acre would be 1 inch. Even several times that rate would effectively eliminate this option. While the landspreading limit is adjustable according to NR 528.07(5)(b) 2. and that is carried over in NR 528.07(5)(b)4., for a dedicated sediment management site that still must comply with the locational criteria and performance standards of NR 528.04(1)-(2), this seems overly restrictive. (MEG/LWM)

RESPONSE: The landspreading rates are consistent with the normal practice in other Department programs that all regulate the landspreading of industrial and municipal sludge. The issue of appropriateness of applying locational criteria is addressed under the Department's response to comment number 6. The Department has added language to NR 528.07(5)(b)4. to clarify that the requirements for a dedicated site are not more restrictive than those for a landspreading site under NR 528.07(4)(b).

Related to compliance

14. COMMENT: What happens if someone doesn't comply with the rule? How will you know? What enforcement action will the Department take if there is non-compliance? These are not addressed in the rule. (DECO)

RESPONSE: The Department has a stepped enforcement process that applies to all programs so it is not addressed in each individual code. Enforcement and penalties are addressed under Subchapter VIII of Chapter 289. Enforcement authority is provided under s. 289.97, Stats., for any violation of any rule promulgated under authority of ch. 289. There are provisions for penalties in

s. 289.96 that may be assessed. Compliance will be based on complaints and there is language under NR 528.10 which allows the Department access to sites and records.

Related to comments suggested by the Wisconsin Legislative Council Rules Clearinghouse

15. COMMENT: Comments were made regarding: 1) form, style and placement in administrative code; 2) adequacy of references to related statutes, rules and forms; 3) clarity, grammar, punctuation and use of plain language. (WLCRC)

RESPONSE: The Department accepted these comments and made changes to rule language in response to each of them. The only change not incorporated was the recommendation to delete the phrase, "under the supervision of an environmental professional" in NR 528.06(3)(intro.) and 528.06(4)(intro.) because it is confusing. The Department eliminated the confusion by adding a definition of "environmental professional" to the rule language.

**List of Those who Commented and Acronyms Used in Response to Comments**

<p>BA - Broydrick &amp; Assoc., written comments submitted by Lynn Morgan. CMAD - City Madison, written comments at February 12, 2009 public hearing and written comments submitted by Greg Fries. CWAU - City of Wausau, oral comments at February 11 public hearing and written comments submitted by Allen Wesolowski. DECO - Davy Engineering Company, written comments submitted by Daniel Uhl. MEG/LWM - Municipal Environmental Group/League of Wisconsin Municipalities, oral comments from Julie Baldwin at February 12, 2009 public hearing and written comments submitted by Paul Kent NRB - Natural Resources Board, written comments submitted by Dave Clausen. NRT - Natural Resources Technology, written comments submitted by Richard Webb RAW - River Alliance of Wisconsin, oral comments at February 12, 2009 public hearing by Lori Grant. SLH - State Laboratory of Hygiene, written comments submitted by George Bowman. TA - TestAmerica, written comments submitted by Paul Junio. WBA - Wisconsin Builders Association, oral comments at February 12, 2009 public hearing and written comments submitted by Patrick Stevens. WLCRC - Wisconsin Legislative Council Rules Clearinghouse.</p>
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