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Scott Walker, Governor
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POWTS ADVISORY CODE COUNCIL MEETING
Room 121C, 1400 East Washington Avenue, Madison
Contact: Sandra Cleveland (608) 266-0797
February 10, 2016

9:00 am

The following agenda describes the issues that the Council plans to consider at the meeting. At the time of the meeting, items may be removed from the agenda. Please consult the meeting minutes for a record of the actions of the Council.

AGENDA

OPEN SESSION – CALL TO ORDER – ROLL CALL

A. Adoption of Agenda (1)

B. Approval of Minutes of December 2, 2015 (2)

C. Department Updates

D. Council Member Updates on Association Meetings

E. Continue Review and Consideration of Changes to SPS 381-387 and 391 (3-17)

F. Future Business

G. Public Comments

H. Adjournment

POWTS ADVISORY CODE COUNCIL
MEETING MINUTES
December 2, 2015

PRESENT: Steven Crosby; Dale Dimond; Alan Kaddatz; Robert Schmidt; Bryon Wooten

STAFF: Dan Smith, Administrative Rules Coordinator; Sandra Cleveland, Administrative Rules Coordinator; Matt Janzen, POWTS Lead; Bradley Johnson, Section Chief; Kimberly Wood, Program Assistant Supervisor-Adv; and other Department staff

Bryon Wooten, Chair, called the meeting to order at 9:06 a.m. A quorum of five (5) members was present.

ADOPTION OF AGENDA

MOTION: Robert Schmidt moved, seconded by Steven Crosby, to adopt the agenda as published. Motion carried unanimously.

APPROVAL OF MINUTES OF NOVEMBER 12, 2015

MOTION: Alan Kaddatz moved, seconded by Dale Dimond, to approve the minutes from November 12, 2015 as published. Motion carried unanimously.

ADJOURNMENT

MOTION: Steven Crosby moved, seconded by Alan Kaddatz, to adjourn the meeting. Motion carried unanimously.

The meeting adjourned at 1:09 p.m.

Wisconsin Department of Safety and Professional Services
Private Onsite Wastewater Treatment Systems Code Advisory Council
Potential Administrative Rule Recommendations
2-10-2016

SPS 381 DEFINITIONS AND STANDARDS					
NO.	**SPS SECTION**	**ISSUE**	**POTENTIAL CHANGES**	**POTENTIAL COSTS/BENEFITS**	**CLASSIFICATION**
1	381.01 (154r)	Definition for "Moh's Scale of Hardness" proposed for use in 384.30(6)(j)2.	Add definition.	No cost. Clarify meaning.	***See draft language.***
2					

SPS 382 DESIGN, CONSTRUCTION, INSTALLATION, SUPERVISION, MAINTENANCE AND INSPECTION OF PLUMBING					
NO.	**SPS SECTION**	**ISSUE**	**POTENTIAL CHANGES**	**POTENTIAL COSTS/BENEFITS**	**CLASSIFICATION**
20	382.30(10) *Council Addition*	Exterior ejector pits - recommendation to Plumbing Council forthcoming.			Medium ***Discuss at 2/10/2016 meeting***
21	382.30(11) *Council Addition*	Clarification of building sewer insulation requirements – recommendation to Plumbing Council forthcoming.			Medium ***Discuss at 2/10/2016 meeting***
22	382.35(5) *Council Addition*	Need for frost sleeves on shallow building sewers?			Medium
23					

SPS 383 PRIVATE ONSITE WASTEWATER TREATMENT SYSTEMS					
NO.	**SPS SECTION**	**ISSUE**	**POTENTIAL CHANGES**	**POTENTIAL COSTS/BENEFITS**	**CLASSIFICATION**
25	383.21 *Council Addition*	Clarify sanitary permit requirements for replacement of defective components in recently installed POWTS *(i.e. Replacement of a cracked tank after the installation has been approved, including changing pumps)*			Medium ***Discuss at 2/10/2016 meeting***
26	383.22(2)(c) *Council Addition*	Are changes to signature requirements needed to accommodate electronic submittal of plans?			Low ***See draft language***

SPS 383 PRIVATE ONSITE WASTEWATER TREATMENT SYSTEMS					
NO.	**SPS SECTION**	**ISSUE**	**POTENTIAL CHANGES**	**POTENTIAL COSTS/BENEFITS**	**CLASSIFICATION**
27	383.44	Short of a petition for variance, many commercial facilities have been pushed towards unreliable pretreatment devices which fail to perform.	Allow 3rd soil column or alternative sizing method for High Strength Wastewater which would allow the same loading rate of BOD, FOG and TSS per square foot as system receiving "normal" strength effluent. An alternative is to entirely eliminate the limitation in SPS 383.44(2)(a) and size based upon effluent loading.	No change in costs. This revision would allow another simple low-technology option for owners and installers.	High
28	383.44-1 Maximum Soil Application Rates Based Upon Percolation Rates (Table)	The rule references out of date percolation rates.	Remove all references to percolation rates.	Costs are expected to be minimal. New morphological soil tests would be needed to replace old soil tests showing percolation rates which are no longer used.	Low ***See draft language***
29	383.44-2 Maximum Soil Application Rates Based Upon Morphological Soil Evaluation (Table)	High strength waste (>220 BOD and >150 TSS) have limited treatment options.	Additional loading rate column for moderately high strength wastes.	No costs increases are expected from this proposal. This proposal would provide more flexibility for dealing with high strength wastes.	High
30	383.44(2) Influent quality.	Various commercial buildings produce influent quality greater than those listed, but still may be best served by a POWTS.	Add (d), “New facilities potentially generating waste greater than the parameters listed in (a) may be designated as ‘At-Risk’. At-Risk facilities shall submit testing data, according to section (b), within one year of installation. Those facilities shown to produce parameters above the limits in (a) shall make the necessary changes to reduce wastewater strength according to the management plan.”	The cost of this proposal expected to be minimal. This proposal is expected to provide better management of ‘at-risk’ systems and reduce violation of the code.	High

SPS 383 PRIVATE ONSITE WASTEWATER TREATMENT SYSTEMS					
NO.	**SPS SECTION**	**ISSUE**	**POTENTIAL CHANGES**	**POTENTIAL COSTS/BENEFITS**	**CLASSIFICATION**
31	383.44(2)(a)	Currently, the department exclusively allows some form of aerobic treatment component to meet the parameters specified in 383.44(2)(a) in situations where those parameters would be exceeded without the aerobic treatment. Often, the aerobic components are incorporated into a POWTS design without consideration of relevant hydraulic flow and organic loading data. The hydraulic flow and organic loading must be within the performance limits of the proposed aerobic component model in order for it to operate properly. Furthermore, once these components are in operation, many are not maintained in a timely manner resulting in pre-maturely failing drain fields. Other design techniques are available that would eliminate these inherent problems with aerobic components. These techniques were effectively applied in Wisconsin for "high-strength" wastewater application to soil dispersal areas prior to the pervasive use of aerobic components which did not begin until the mid- to late 1990's.	Revise s. SPS 383.44(2)(a) to read: "Unless otherwise permitted under s. SPS 383.46," (remainder as currently worded). Then add a new code section, s. SPS 383.46, which would read: "Design techniques for in situ soil dispersal components receiving high-strength wastewater. (1) Definition. Influent to an in situ soil dispersal component shall be considered high-strength if it exceeds the parameters specified under s. SPS 383.44 (2)(a)&(b). (2) Permitted design techniques. Permitted techniques for designing in situ soil dispersal components receiving high strength wastewater include one or a combination of the following: (a) Determine the minimum required dispersal area based on organic loading rates. (b) Provide three separate dispersal components each having fifty percent of the minimum required area based on hydraulic loading rates. In an annual rotation scheme employing a diverter valve, two units would be on-line while one unit would be off-line." (These alternatives are suggestions open to discussion.)	The cost of this proposal is unknown. The proposed language would provide alternatives to the use of aerobic components to reduce organic load concentrations and to the inherent and intensive ATU maintenance requirements.	High

SPS 383 PRIVATE ONSITE WASTEWATER TREATMENT SYSTEMS					
NO.	**SPS SECTION**	**ISSUE**	**POTENTIAL CHANGES**	**POTENTIAL COSTS/BENEFITS**	**CLASSIFICATION**
32	383.44(6)(a)2 ORIENTATION	Some component manuals allow systems to be constructed <1% off contour.	Codify component manual language by striking "along" and replacing it with "within 1% of".	This proposal is not expected to increase costs. This proposal is expected to clarify rule requirements and provide a basis for more consistent interpretation of the rule.	Low ***See draft language***
33	383.45 *Council Addition*	Specify cover/backfill depth for effluent lines and forcemains.			Medium
34	383.45(2) *Council Addition*	Change language to say "…frozen at <u>or below</u> the infiltrative surface…"			Low ***See draft language***
35	383.45(6) *Council Addition*	Can we clarify requirements for POWTS in a floodplain? Should 383.45(6) allow OB pipes <2' above RFE, if they have watertight caps.			Medium
36	383.52(1) & 384.27(7)(h)	Clarify the concept of "locked or secured"			Low ***Further discussion at 2-10-2016 meeting***
37	383.54(2)(b) or fund department monitoring 383.70	Many pretreatment devices are not tested to the environmental conditions present in Wisconsin. Too many pretreatment devices appear not to perform as advertised causing POWTS failures and owners/installers upset with the department for approving these devices. Product approval has become more of a "buyer beware" environment than a real review of pertinent performance testing.	Require annual effluent testing for all devices that install pretreatment devices	The potential cost would need to be determined. It would provide better data on the performance of devices approved for use in this state. Better data will result in ability to make informed decisions on the performance of devices.	High
37	OTHER *Council Addition*	Inventory/maintenance of state owned POWTS			

SPS 383 PRIVATE ONSITE WASTEWATER TREATMENT SYSTEMS					
NO.	**SPS SECTION**	**ISSUE**	**POTENTIAL CHANGES**	**POTENTIAL COSTS/BENEFITS**	**CLASSIFICATION**
38	OTHER *Council Addition*	Wisconsin Fund Grant program			
39					

SPS 384 PLUMBING PRODUCTS					
NO.	**SPS SECTION**	**ISSUE**	**POTENTIAL CHANGES**	**POTENTIAL COSTS/BENEFITS**	**CLASSIFICATION**
50	384.25 *Council Addition*	Clarify requirements for repair of POWTS tanks • When can a tank be repaired vs replaced? • When is DSPS or manufacturer's approval required for a repair? • Sanitary permit?			Medium ***Discuss at 2-10-2016 meeting***
51	384.30(6)(j)	Various natural materials non-conducive to filtering in a POWTS have been proposed.	Additional language stating: "Also, sand used as a filtering medium in a treatment or dispersal component of a POWTS shall meet all of the following requirements: be comprised of outwash parent material and have a hardness value of at least 3 on Moh's Scale of Hardness."	No expected cost increase. This proposal would clarify the type of material allowed for use in a POWTS.	Low ***See draft language***
52					

SPS 385 SOIL AND SITE EVALUATIONS					
NO	**SPS SECTION**	**ISSUE**	**POTENTIAL CHANGES**	**POTENTIAL COSTS/BENEFITS**	**CLASSIFICATION**
60	385.60(2)(a)	Wording does not adequately reflect the current use of Interpretative Determination Reports (IDR).	Revise second sentence. The written report shall conclusively determine current conditions of periodic soil saturation and assess their effect upon the operation of a POWTS.	No expected costs. Clarifies the use and intent of IDRs.	Low ***See draft language***
61	385.60(2)(b)	Delays in approval of Interpretative Determinations (IDR) due to scheduling onsite with Wastewater Specialists.	Revise to exempt IDRs written by licensed Professional Soil Scientists from Departmental review.	May reduce review fees. Reduce delay in time to receive plan approval, especially during peak submittal times.	Low ***See draft language***
62					

ISSUE NO.	PROPOSED LANGUAGE PROVISIONS
26	*SPS 383.22 (note) is created to read:* **Note:** Nothing in this chapter is intended to prohibit the submission and acceptance of planning documents in an electronic or digital media. *SPS 385.40(2) (b) 1. a.is amended to read:* SPS 385.40(2) (b) 1. a. The ~~original~~ signature of the certified soil tester who collected the data;
28	*SPS 383.44 (4) (f) and Table 383.44-1 are repealed.*
32	S*PS 383.44 (6) (a) 2. is amended to read:* SPS 383.44 (6) (a) 2. The longest dimension of a POWTS treatment or dispersal component consisting in part of in situ soil shall be oriented ~~along~~ <u>within 1% of</u> the surface contour of the component site location unless otherwise approved by the department.
34	*SPS 383.45 (2) is amended to read:* SPS 383.45 (2) FROZEN SOIL. POWTS treatment and dispersal components consisting in part of in situ soil may not be installed if the soil is frozen at <u>or below</u> the infiltrative surface of the component.
51 and 1	*SPS 384.30(6)(j)(intro.) is created to read:* SPS 384.30 (6) (j) (intro.) Sand used in a treatment medium shall meet all of the following: *SPS 384.30(6)(j) is renumbered as SPS 384.30 (6) (j) 1. and amended to read:* <u>1.</u> Sand that is placed as a ~~filtering~~ <u>treatment</u> medium in a stormwater subsurface infiltration system shall conform to ASTM Standard C33 for fine aggregate.

ISSUE NO.	PROPOSED LANGUAGE PROVISIONS
51 and 1 (cont.)	*SPS 384.30 (6) (j) 2. is created to read:* SPS 384.30 (6) (j) 2. Sand that is used as a medium in a treatment or dispersal component of a POWTS shall be comprised of outwash parent material and have a hardness value of at least 3 on Moh's Scale of Hardness. *SPS 381.01 (154r) is created to read:* "Moh's scale of hardness" means a test for a mineral's hardness based on a mineral's resistance to scratching by another mineral. The scale classifies a mineral from 1 to 10, with the softest mineral having a hardness value of 1 and the hardest mineral having a hardness value of 10. The 10 minerals used in the scale in the order of softest to hardest are talc, gypsum, calcite, fluorite, apatite, orthoclase, quartz, topaz, corundum, and diamond.
60	*SPS 385.60 (2) is amended to re*ad: SPS 385.60 (2) INTERPRETIVE DETERMINATIONS. (a) A written report by a certified soil tester evaluating and interpreting redoximorphic soil features, or other soil color patterns, may be submitted to the department in lieu of high groundwater determination data. The written report shall conclusively ~~demonstrate that the existing soil morphological features or color patterns are not indicative of~~ determine current conditions of periodic soil saturation and assess their effect upon the operation of a POWTS.
61	*SPS 385.60 (2) (b) is amended to read:* SPS 385.60 (2) (b) ~~The~~ Except as provided under par. (d), the department shall make a determination on the validity of the data, results and conclusions set forth in the report. *SPS 385.60 (2) (d) is created to read:* SPS 385.60 (2) (d) The department may exempt an interpretive determination from review under this subsection if the report is prepared by a professional soil scientist who is licensed under s. 470.04, Stats.

Private Onsite Wastewater Treatment Systems

Draft Administrative Rule Revisions

2-10-2016

Issue 26: Signature requirements to accommodate electronic submittal of plans.

SPS 383.22 Plan review and approval. (2) PLANS AND SPECIFICATIONS. (a) 1. When plans are submitted to the department for review, at least 3 sets of plans and one set of specifications shall be provided.

Note: Specifications for a project do not have to be a separate document but may be delineated on the plans.

2. When plans are submitted to a designated agent or governmental unit for review, at least 2 sets of plans and one set of specifications shall be provided.

3. Plans and specifications submitted for review shall be clear, legible and permanent copies.

4. Plans submitted for review shall include all of the following:

a. Details and configuration layouts depicting how the design is to be constructed and how the design is to accomplish the treatment in accordance with ss. SPS 383.43 and 383.44 and dispersal that is claimed or the holding of wastewater.

b. Specifications, including a description of the materials for the project and the installation or construction practices and methods to be employed.

c. A site plan with a bench mark either scaled or dimensioned, delineating all treatment and dispersal components and their relationship to any items listed in Table 383.43-1.

(b) 1. All plans submitted for review shall be accompanied by sufficient data and information to determine if the proposed POWTS or modification of an existing POWTS and their performance will conform with chs. SPS 382 to 384 including, but not limited to all of the following:

a. A plan review application form specified by the department.

Note: The Department forms required in this chapter are available for a nominal fee at telephone 800-DOC-SALE or 411 (Telecommunications Relay) or at docsales@doa.state.wi.us, or at no charge at the Department's Web site at http://dsps.wi.gov through links to Division of Industry Services forms.

b. The minimum and maximum wastewater flow and load of the proposed project and the method or rationale for determining the flow and load.

c. Documentation to support treatment and dispersal claims.

d. A management plan for the proposed design reflecting conformance to subch. V.

e. A soil and site evaluation report in accordance with s. SPS 385.40 for those POWTS components that consist in part of in situ soil.

f. A description of a contingency plan in the event the proposed POWTS fails and cannot be repaired.

2. In addition to the information required under subd. 1., plans for one or more holding tanks serving a large commercial, industrial, recreational or residential development with an estimated daily wastewater flow of 3,000 gallons or more shall include information pursuant to s. NR 113.07 (1) ©.

3. In addition to the information required under subd. 1., plans for a POWTS that is to serve a dwelling where the design of the POWTS is not based upon the number of bedrooms within the dwelling shall be accompanied by information documenting that design condition on the deed for the property.

4. In addition to the information required under subd. 1., plans for an experimental POWTS shall be accompanied by information required under s. SPS 383.27 (3).

5. In addition to the information required under subd. 1., plans for a POWTS which is to serve more than one structure or building, other than two one- or 2-family dwellings and their accessory buildings located on a single parcel of land, shall be accompanied by information that does all of the following:

a. Describes the legal entity, public or private, that has responsibility for the operation and maintenance of the POWTS.

b. Includes a copy of a recorded legal document that identifies all the parties that have ownership rights and are responsible for the operation and maintenance of the POWTS.

6. a. In addition to the information required under subd. 1., plans for a POWTS with a design wastewater flow exceeding 12,000 gallons per day shall not be approved until documentation has been submitted to the department indicating that the department of natural resources has concurred with the design of the POWTS.

b. Solely for the purpose of determining the applicability of subd. 6. A., the design wastewater flow of 12,000 gpd shall be deemed equivalent to 85 bedrooms for residential dwellings, including one- and 2-family dwellings, multi-family dwellings and mobile homes.

c. Solely for the purpose of determining the applicability of subd. 6. A., the design wastewater flow of 12,000 gpd for commercial facilities shall be calculated using the estimated wastewater flows specified in A-383.43 (6) of ch. SPS 383 Appendix.

d. Solely for the purpose of determining the applicability of subd. 6. A., for residential dwellings combined with commercial facilities the design wastewater flow of 12,000 gpd shall be calculated by prorating the number of bedrooms on the basis of 85 bedrooms equaling 12,000 gpd for the residential dwellings and using the estimated flow under s. SPS 383.43 (3) (a) and A-383.43 (6) of ch. SPS 383 Appendix to calculate the design flow for the commercial facilities.

e. For the purpose of determining the applicability of subd. 6. A., the design wastewater flow of 12,000 gpd shall include the design wastewater flow of all POWTS that are located on the same property or on properties under the same ownership and where the perimeter of a distribution cell of a POWTS dispersal component for one POWTS is less than 1,500 feet from the perimeter of a distribution cell of a POWTS dispersal component of any other POWTS under the same ownership.

f. For the purpose of determining the applicability of subd. 6. A., the combined design wastewater flow shall include that of any existing POWTS which falls within the parameters of subd. 6. E.

g. Under subd. 6. A., the same ownership is defined to be a person, group of persons or a corporation which owns a majority interest in the properties where majority ownership is based upon a majority of the issued voting stock, a majority of the members if no voting stock is issued, a majority of the board of the directors or comparable governing body or participation of each general partner in the profits of a partnership.

c. Plans and specifications which are required to be submitted for review under sub. (1) shall be one of the following:

1. Signed and sealed in accordance with s. A-E 2.02 by an individual who is registered by the department as an architect, engineer, designer of plumbing systems or designer of private sewage systems.

2. Signed, including license number, and dated by an individual who is responsible for the installation of the POWTS and who is licensed by the department as a master plumber or master plumber-restricted service.

(d) Plans submitted to the department for review shall be accompanied by a fee in accordance with ss. SPS 302.61 and 302.65.

Note: Nothing in this chapter is intended to prohibit the submission and acceptance of planning documents in an electronic or digital media.

SPS 385.40 Evaluation reports. (1) GENERAL. A soil evaluation report shall be prepared and submitted to the governmental unit having jurisdiction upon the completion of the evaluation and associated report form.

(2) SOIL REPORT CERTIFICATION AND FORMAT. (a) *Soil evaluation reports.* Soil evaluation reports shall be prepared in a format specified by the department and this chapter.

Note: The Department forms required in this chapter are available for a nominal fee at telephone 800-DOC-SALE or 411 (Telecommunications Relay) or at docsales@doa.state.wi.us, or at no charge at the Department's Web site at http://dsps.wi.gov through links to Division of Industry Services forms.

(b) *Certification.* 1. Except as provided in subd. 2., each page of a soil evaluation report shall bear:

a. The ~~original~~ signature of the certified soil tester who collected the data;

b. The certified soil tester's identification number; and

c. The date the report is signed.

2. When more than one sheet of a soil evaluation report is bound together into one volume, only the title sheet shall:

a. Be required to be signed, dated and bear the identification number of the certified soil tester who collected the data; and

b. Clearly identify all other sheets comprising the bound volume.

Issue 28: Remove outdated references to percolation rates.

SPS 383.44 Parameters for POWTS components consisting of in situ soil.

(4) CAPABILITIES. (a) 1. a. Except as provided under subd. 2., the dispersal capability of a POWTS treatment or dispersal component consisting in part of unsaturated soil shall be limited to that specified in Table 383.44-1 or Table 383.44-2 based upon the influent quality concentrations being applied.

b. Under subd. 1. a., the influent quality parameter with the highest concentration shall determine the maximum application rate.

c. Except as provided in par. (c), the soil conditions at the infiltrative surface of unsaturated soil to which influent is to be discharged shall be used to establish the maximum application rate for a POWTS dispersal design.

d. The moist soil consistence of the soil horizon in which the infiltrative surface of a POWTS treatment or dispersal component will be located may not be stronger than firm or any cemented classification.

e. The maximum soil application for soil with moderate to strong platy structure shall not exceed 0.2 gals./sq. ft./day for effluent concentrations of ≤30 mg/L BOD_5 and TSS and shall be 0.0 gals./sq. ft./day for effluent concentrations of > 30 mg/L BOD_5 and TSS.

~~f. The application rates specified under Table 383.44-1 shall only be recognized where the percolation results have been filed with the governmental unit before July 2, 1994.~~

(5) EFFLUENT DISTRIBUTION. (a) 1. Except as provided in subd. 2., the distribution of effluent to a treatment or dispersal component shall be by means of pressure distribution as specified in Tables 383.44-2 and 383.44-3.

2. Pressure distribution is not required when rehabilitating an existing non-pressurized in situ soil treatment or dispersal component that is persistently ponded and that has at least 24 inches of unsaturated soil beneath the infiltrative surface of the component.

(b) Each dose of effluent by means of pressurized distribution into a treatment or dispersal component consisting in part of in situ soil may not be less than 5 times the void volume of the POWTS distribution laterals.

~~**Table 383.44-1**~~
~~**Maximum Soil Application Rates Based Upon Percolation Rates**~~

~~**Percolation Rate (minutes per inch)**~~	~~**Maximum Monthly Average**~~	
	~~**BOD_5 > 30mg/L ≤ 220 mg/L TSS > 30 mg/L ≤ 150 mg/L (gals/sq ft/day)**~~	~~**BOD_5 ≤ 30 mg/L TSS ≤ 30 mg/L (gals/sq ft/day)**~~
~~0 to less than 10~~	~~0.7~~	~~1.2~~
~~10 to less than 30~~	~~0.6~~	~~0.9~~
~~30 to less than 45~~	~~0.5~~	~~0.7~~
~~45 to less than 60~~	~~0.3~~	~~0.5~~
~~60 to 120~~	~~0.2~~	~~0.3~~
~~greater than 120~~	~~0.0~~	~~0.0~~

~~Note: > means greater than~~
~~≤ means less than or equal to~~

Issue 32: Allow systems to be constructed <1% off contour consistent with component manuals.

SPS 383.44 Parameters for POWTS components consisting of in situ soil. (6) ORIENTATION. (a) 1. The infiltrative surface of a distribution cell within a POWTS treatment or dispersal component consisting in part of in situ soil and located in fill material above original grade shall be level.

2. The longest dimension of a POWTS treatment or dispersal component consisting in part of in situ soil shall be oriented ~~along~~ within 1% of the surface contour of the component site location unless otherwise approved by the department.

(b) The infiltrative surface of a distribution cell within a POWTS treatment or dispersal component consisting in part of in situ soil and located below the surface of the original grade shall be level.

(c) POWTS treatment or dispersal components consisting in part of in situ soil shall be so located as to minimize the infiltration of storm water into the component.

Issue 34: Clarify that POWTS components may not be installed if the soil is frozen below the infiltrative surface of the component.

SPS 383.45 Installation. (1) GENERAL. A POWTS shall be constructed and installed in such a manner to hold wastewater or reduce the contaminant load and disperse the flow of wastewater in accordance with this subchapter and the plan approval under s. SPS 383.22.

(2) FROZEN SOIL. POWTS treatment and dispersal components consisting in part of in situ soil may not be installed if the soil is frozen at or below the infiltrative surface of the component.

(3) SNOW COVER. Snow cover shall be removed before excavating or installing POWTS treatment and dispersal components consisting in part of in situ soil.

(4) MOISTURE. The soil moisture content for a POWTS treatment or dispersal component consisting in part of in situ soil shall be evaluated immediately prior to installation of the component. If the soil at the infiltrative surface can be rolled into a ¼-inch wire, the installation may not proceed.

(5) BEDDING. All vessels and pipes of a POWTS shall be bedded in accordance with a product approval under s. SPS 384.10 or a plan approval under s. SPS 383.22.

(6) FLOODPLAIN. (a) All POWTS treatment tanks, holding and dispersal tanks that are located in floodplain areas shall be made and maintained watertight to prevent infiltration.

(b) Vent pipes and observation pipes serving POWTS components that are located in floodplain areas shall terminate at least 2 feet above regional flood levels.

Note: See s. SPS 383.43 (8) (g) relative to anchoring provisions.

Issues 51 and 1: Clarify the type of materials to be used in a POWTS.

SPS 381.01 Definitions. In chs. SPS 381 to 387, except as otherwise specifically defined:

(154m) "Mixed wastewater" means a combination of domestic and non-domestic wastewater.

(154r) "Moh's scale of hardness" means a test for a mineral's hardness based on the mineral's resistance to scratching by another mineral. The scale classifies a mineral from 1 to 10, with the softest mineral having a hardness value of 1 and the hardest mineral having a hardness value of 10. The 10 minerals used in the scale in the order of softest to hardest are talc, gypsum, calcite, fluorite, apatite, orthoclase, quartz, topaz,, corundum, and diamond.

(155) "Multiple dwelling" means a building containing more than 2 dwelling units.

SPS 384.30 Plumbing materials. (6) SPECIAL MATERIALS. (a) *Sheet lead.* Sheet lead for the following uses may not weigh less than indicated in subds. 1. and 2.

1. Site-fabricated flashings for vent pipes, 3 pounds per square foot; and
2. Prefabricated flashings for vent pipes, 2½ pounds per square foot.

(b) *Traps and fixture drain connection fittings.* Copper or tubular brass traps and fixture drain connection fittings shall be at least of 20 gage material.

(c) *Sheet copper.* Sheet copper for the following uses may not weigh less than indicated in subds. 1. and 2. and shall conform to ASTM B152.

1. Flashing for vent pipes, 8 ounces per square foot; and
2. Flush tank linings, 10 ounces per square foot.

(d) *Cleanout plugs.* Cleanout plugs shall be of brass or plastic. Brass cleanout plugs shall be used with metallic piping only and shall conform to ASTM A74. Plastic cleanout plugs shall conform to the requirements of sub. (5) (a).

(e) *Flush pipes and fittings.* Flush pipes and fittings shall be of nonferrous material and shall conform to ASME A112.19.5.

(f) *Safing material.* Safing materials shall be waterproof when subjected to 2 feet of hydrostatic head when tested in accordance with ASTM C1306 or ASTM D4068. The material shall be recognized by the manufacturer for use as a safing material.

(g) *Geotextile fabrics.* Geotextile fabric used in a POWTS to prevent backfill material from entering the distribution cell shall meet the requirements listed in Table 384.30-12.

(h) *Leaching chambers.* Leaching chambers for distribution cell components of POWTS or stormwater subsurface infiltration systems shall meet all of the following requirements:

1. Constructed of corrosion resistant materials.
2. Designed to prevent soil surrounding the chamber from entering the chamber.
3. Capable of withstanding pressures that the leaching chamber is intended to encounter.

(i) *Stone aggregate.* Stone aggregate which is used as a filtering medium or to create a distribution cell in a treatment or dispersal component of a POWTS or stormwater subsurface infiltration system shall meet all of the following requirements:

1. Conform to ASTM Standard C33 for coarse aggregate prior to washing.
2. Be washed to remove fine material.
3. Be ½ to 2½ inch in size.
4. Have a hardness value of at least 3 on Moh's Scale of Hardness.

Note: Stone that can scratch a copper penny without leaving any residual stone material on the penny has a hardness value of at least 3 on Moh's Scale of Hardness.

(j) *Sand.* Sand used in a treatment medium shall meet all of the following:

1. Sand that is placed as a ~~filtering~~ treatment medium in a stormwater subsurface infiltration system shall conform to ASTM Standard C33 for fine aggregate.

2. Sand that is used as a medium in a treatment or dispersal component of a POWTS shall be comprised of outwash parent material and have a hardness value of at least 3 on Moh's Scale of Hardness.

(k) *Synthetic aggregate.* Synthetic aggregate that is used as a filtering medium or to create a distribution cell in a treatment or dispersal component of a POWTS or stormwater subsurface infiltration system shall meet all of the following requirements:

1. Be made from inert materials.
2. Be ½ inch to 2½ inches in size.
3. Be made of material that will not contaminate groundwater.
4. Be recognized by the manufacturer for use as a filtering media or a material to create a distribution cell.

Issues 60 and 61: Ensure the rule adequately reflects the current use of Interpretative Determination Reports (IDRs). Exempt IDRs written by licensed professional soil scientists from department review to reduce delays in approval of IDRs.

SPS 385.60 Soil saturation determinations. (1) GENERAL. (a) A property owner, or the owner's agent, may submit documentation to prove that redoximorphic features, or other soil color patterns, at a particular site are not indicative of periodically saturated soil conditions or high groundwater elevation.

(b) Documentation shall be in the form of an interpretive determination, soil saturation determination, hydrograph procedure or artificially controlled navigable water determination pursuant to this section.

(2) INTERPRETIVE DETERMINATIONS. (a) A written report by a certified soil tester evaluating and interpreting redoximorphic soil features, or other soil color patterns, may be submitted to the department in lieu of high groundwater determination data. The written report shall conclusively ~~demonstrate that the existing soil morphological features or color patterns are not indicative of~~ determine current conditions of periodic soil saturation and assess their effect upon the operation of a POWTS.

(b) ~~The~~Except as provided under par. (d), the department shall make a determination on the validity of the data, results and conclusions set forth in the report.

(c) The written report shall include, but is not limited to, all of the following information:

1. A soil evaluation report pursuant to s. SPS 385.40.
2. An interpretive review of the site including, but not limited to, all of the following:

a. Local hydrology.

b. A historical interpretation of the local geomorphology.

c. Soil disturbance and hydraulic modification.

d. The landscape position and local topography in the area under investigation.

3. Soil series and mapping units, if available, for the immediate area, as listed in the USDA soil survey.
4. Data, if any, from previous soil saturation determinations in similar soil conditions and landscape position.
5. Any written reports, comments or recommendations by the governmental unit or department staff.

(d) The department may exempt an interpretive determination from review under this subsection if the report is prepared by a professional soil scientist who is licensed under s. 470.04, Stats.