Clearinghouse Rule 98-083

RULES CERTIFICATE

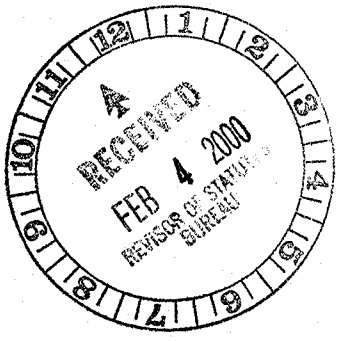
Department of Commerce

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Brenda J. Blanchard, Secretary of the Department of Commerce, and custodian of the official records of said department, do hereby certify that the annexed rule(s) relating to private onsite wastewater treatment systems
(Subject)

were duly approved and adopted by this department.

I further certify that said copy has been compared by me with the original on file in the department and that the same is a true copy thereof, and of the whole of such original.



IN TESTIMONY WHEREOF, I have hereunto set my hand at 201 West Washington Avenue in the city of Madison, this 3rd day of February A.D. 2000

Brenda J. Blanchard
Secretary

99-083

COM-10530 (R.11/97)

7-1-00

ORDER OF ADOPTION

Department of Commerce

Pursuant to authority vested in the Department of Commerce by sections 101.02 (1), 101.63 (1), 101.73 (1), 101.82 (1) and 145.02 (3) and (4), Stats., the Department of Commerce [X] creates; [X] amends; [X] repeals and recreates; [X] repeals and adopts rules of Wisconsin Administrative Code chapters:

(number)	(Title)
Comm 2	Fee Schedule
Comm 5	Credentials
Comm 20 to 25	Uniform Dwelling Code
Comm 50 to 64	Building and Heating, Ventilating and Air Conditioning Code
Comm 66	Uniform Multifamily Dwellings
Comm 81 to 87	Plumbing
Comm 91	Sanitation

The attached rules shall take effect on the first day of the third month following publication in the Wisconsin Administrative Register pursuant to section 227.22, Stats.

Adopted at Madison, Wisconsin this

date: 2/3/06

DEPARTMENT OF COMMERCE

Secretary

August 30, 1999

MOTION OF THE SENATE COMMITTEE ON AGRICULTURE, ENVIRONMENTAL RESOURCES AND CAMPAIGN FINANCE REFORM

MOVED as follows:

1. The Senate Committee on Agriculture, Environmental Resources and Campaign Finance Reform, pursuant to s. 227.19 (4) (b) 2., requests that the Department of Commerce consider modifications to Clearinghouse Rule 98-083 to do all of the following:

a. Incorporate the descriptions of and design requirements for all allowable types of privately owned waste treatment systems in the rule.

b. Establish a process and criteria for proposing new allowable types of privately owned waste treatment systems, to include rule promulgation.

c. Establish a process and criteria for approving experimental privately owned waste treatment systems, to include requirements for the monitoring of the system's functioning and performance.

d. Create additional mechanisms to ensure that inspection and maintenance requirements are fulfilled.

e. Further delay the implementation of appropriate provisions of the rule to allow for evaluation and enhancement of local planning and zoning and for county preparation and staff training.

f. Develop methods for ambient monitoring to obtain information on compliance with groundwater standards by privately owned waste treatment systems.

g. Maintain the policy that a holding tank is the system design of last resort.

h. Establish a mechanism, in cooperation with the Department of Natural Resources, to respond to changes in, and ensure continued compliance with, state groundwater regulations and federal drinking water regulations.

2. The Committee recognizes that the proposed rule is very complex and that many other issues have been presented to and discussed by the Committee. Pursuant to this modification request, the Committee will continue to discuss the proposed rule and anticipates that further proposals for modifications may be made by the Committee or the Department of Commerce.

3. If the Department of Commerce by 4:00 p.m. on August 31, 1999 does not agree, in writing, to consider modifications to Clearinghouse Rule 98-083, the Senate Committee on Natural Resources, pursuant to s. 227.19 (4) (d) 6., Stats., objects to the rule in its entirety on the grounds that the proposed amendment is arbitrary and capricious and imposes an undue hardship.

2nd Draft

September 1, 1999

MOTION OF THE ASSEMBLY COMMITTEE ON NATURAL RESOURCES

MOVED pursuant to s. 227.19 (4) (b) 2. to request that the Department of Commerce consider modifications to Clearinghouse Rule 98-083 to do all of the following:

1. Incorporate the descriptions of and design requirements for all allowable types of private onsite wastewater treatment systems in the rule.

2. Establish a process and criteria for proposing new allowable types of private onsite wastewater treatment systems, to include rule promulgation.

3. Establish a process and criteria for approving experimental private onsite wastewater treatment systems, to include requirements for the monitoring of the system's functioning and performance.

4. Create additional mechanisms to ensure that inspection and maintenance requirements are fulfilled.

5. Further delay the implementation of appropriate provisions of the rule to allow for evaluation and enhancement of local planning and zoning and for county preparation and staff training.

6. Develop methods for ambient monitoring to obtain information on compliance with groundwater standards by private onsite wastewater treatment systems.

7. Maintain the policy that a holding tank is the system design of last resort.

8. Establish a mechanism, in cooperation with the Department of Natural Resources, to respond to changes in, and ensure continued compliance with, state groundwater regulations and federal drinking water regulations.

9. Include a requirement to abandon a private onsite wastewater treatment system and connect to a public sewer under appropriate circumstances.

The Committee recognizes that the proposed rule is very complex and that many other issues have been presented to and discussed by the Committee. Pursuant to this modification request, the Committee will continue to discuss the proposed rule and anticipates that further proposals for modifications may be made by the Committee or the Department of Commerce.

Wisconsin
Department of Commerce

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Tommy G. Thompson, Governor
Brenda J. Blanchard, Secretary

February 3, 2000

Gary Poulson
Assistant Revisor of Statutes
Suite 800
131 West Wilson Street
Madison, Wisconsin 53703-3233

Douglas LaFollette
Secretary of State
10th Floor
30 West Mifflin Street
Madison, Wisconsin 53703

Dear Messrs. Poulson and LaFollette:

TRANSMITTAL OF RULE ADOPTION

CLEARINGHOUSE RULE NO.: 98-083

RULE NO.: Chapters Comm 83, 85 and 91

RELATING TO: Private Onsite Wastewater Treatment Systems

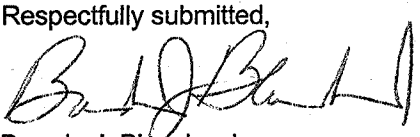
Pursuant to section 227.20, Stats., agencies are required to file a certified copy of every rule adopted by the agency with the offices of the Secretary of State and the Revisor of Statutes.

At this time, the following material is being submitted to you:

1. Order of Adoption.
2. Rules Certificate Form.
3. Rules in Final Draft Form.

Pursuant to section 227.114, Stats., a summary of the final regulatory flexibility analysis is also included.

Respectfully submitted,



Brenda J. Blanchard
Secretary

State of Wisconsin \ Department of Commerce

RULES in FINAL DRAFT FORM Germane Modifications

Rule No.: Chapters Comm 83, 85 and 91

Relating to: Private Onsite Wastewater Treatment Systems

Clearinghouse Rule No.: 98-083

The Wisconsin Department of Commerce proposes an order to repeal Comm 2.63, Comm 20.09 (5) (b) 2. Note, Comm 66.11 Note 2, Comm 82.10 (7), 82.10 (15) and Note, 82.11, Comm 84.60;

to renumber Comm 5.02 Table 5.02 lines 18 to 65, 5.06 Table 5.06 lines 18 to 65, Comm 51.01 (71p), Comm 66.11, Comm 84.20 (5) (j) to (q);

to renumber and amend Comm 2.67 (1), Comm 82.36 (3) (b) 3. a., 82.36 (3) (b) 3. b.;

to amend Comm Table 2.66 line 5, 2.66 (1) (d) 2., 2.67 (2), Comm 52.60 (1) (a) (intro.), 52.62 (1) (b), Comm 82.01 Note, 82.10 (2), 82.10 (8), 82.10 (13), 82.30 (11) (g) 2., 82.32 (4) (b) 1. b., 82.34 (5) (a) 2. (title) and (intro.) and 3. and (b) 2. (intro.), 82.40 (3) (e), 82.40 (8) (b) 1. to 3., Comm 84.10 Table 84.10 line 5, 84.11, 84.30 Table 84.30-5, 84.50 (3) (g) 1. and 7.;

to repeal and recreate Comm 2.52 (5), 2.61 (3), 2.65 and Table 2.65, 2.66 (2) (a), Comm 51.01 (103g), 52.61, 52.62 (1) (a) and Note, 52.63, Comm 82.10 (3), ch. Comm 83, Comm 84.10 (3), 84.30 (2) (d), ch. Comm 85;

and to create Comm 2.67 (1) (b), Comm 5.02 Table 5.02 line 18, 5.06 Table 5.06 line 18, 5.36, Comm 20.07 (19m), (40t) and (59t), 20.09 (5) (b) 3., 25.02, Appendix 20.09, Comm 50.06 (3), 51.01 (19m), 51.01 (71p), 51.01 (103d), 52.60 (1) (c), Comm 52.60 (1) (c), Appendix 50.06 (3), Comm 66.11 (2), Appendix 66.11 (2), ch. Comm 81, Comm 82.37, 82.40 (8) (j), Comm 84.20 (5) (j), 84.20 (5) (q) 1. Note, 84.25, 84.30 (6) (g) to (j) and Table 12, A-84.10 (3) (b), ch. Comm 91, relating to private onsite wastewater treatment systems and sanitation systems and devices.

* *

ANALYSIS OF RULES

Statutory authority:	ss. 101.02 (1), 101.63 (1), 101.73 (1), 101.82 (1) and 145.02 (3) and (4), Stats.
Statutes interpreted:	ss. 145.02 (4), 145.045, 145.13, 145.135, 145.19, and 145.20, Stats.

Under s. 145.02, Stats., the Department of Commerce has the responsibility of safeguarding public health and the waters of the state relative to the construction, installation and maintenance of plumbing. One mechanism of the Department to fulfill this responsibility has been the promulgation of the state plumbing code, chapters Comm 81-87.

Currently, chapter Comm 83 of the plumbing code establishes specific and prescriptive minimum standards for the design, installation, inspection, and maintenance of private sewage systems. In some sense, the current rules dictate or prioritize specific solutions or the selection of certain types of private sewage systems. The current chapter Comm 83 has not been fully revised since 1980. In order for the plumbing code to be effective and reasonable, code standards must be updated periodically to address new health and safety concerns, issues and priorities as well as to reflect changing technologies, methods and materials. The proposed revisions represent a complete reevaluation of the private sewage program as well as the code.

The goals guiding the reengineered program and code are to:

- Minimize risk to public health and the water resources of the state, including groundwater;
- Provide measurable performance criteria for private onsite wastewater treatment systems, formerly known as private sewage systems, that ensure flexibility and predictability and facilitate improvements in system design and product development;
- Promote the recycling of constituents to minimize disposal volumes;
- Promote a wide range of treatment options that match users' needs and desires and the varied soil and site conditions in the state;
- Provide clear boundaries, based on system performance standards for the scope of the code;
- Promote competition in the design, installation and maintenance of systems, thereby, providing users with efficient and cost effective services;
- Provide procedures and establish priorities for the responsibilities of the design, installation and maintenance of systems to ensure that the respective responsibilities are clear and consistent and that compliance is occurring;
- Provide and promote active research and development of innovative technologies and solutions in the desired directions;
- Promote public education about treatment options and proper disposal of wastewater;
- Provide timely and efficient administration and enforcement of the regulatory system; and
- Acknowledge the powers and the abilities of municipalities to determine and control development.

The following summarizes by chapter the significant highlights of the rewrite:

Chapter Comm 2, Fee Schedule; The revisions involve the fees to be charged by the department for reviewing plans, petitions and products relative to private onsite wastewater treatment systems. The fees for plan review are now to be based upon the design wastewater flow of the system and whether the proposed treatment components of the system have been previously recognized under the product approval process. Overall, the revised fee structure does not increase the cost of these services or increase the department's revenues.

Chapter 5, Credentials; Changes to the chapter established a credentialing program for individuals who are to provide required monitoring and maintenance services for POWTS components. To qualify for the credential individuals will either have to obtain training or have experience installing mechanical POWTS components.

Chapters Comm 20-25, One- and 2- Dwelling Code, Chapters Comm 50-64, Commercial Building Code, Chapter Comm 66, Multifamily Dwelling Code; Revisions to the appendices of these codes are to provide greater clarity as to the issuance of building permits for projects served by private onsite wastewater treatment systems. The other revisions provide a cross reference to newly created ch. Comm 91 for privies, composting toilets and incinerating toilets.

Chapter Comm 81, Definitions and Standards; The newly created chapter consolidates into one location the plumbing code definitions and referenced national standards.

Chapter Comm 82, Design, Construction, Installation, Supervision and Inspection of Plumbing; The changes:

- Reflect consistent terminology relative to ch. Comm 83;
- Recognize that sanitation needs can also be fulfilled by nonplumbing means such as composting toilets;
- Eliminate from the plumbing code the mandates of connecting to public sewer and/or water in light of the powers and authority held by municipalities and sewer and water districts under chs. 66 and 281.145, Stats., to require such connections;
- Establish requirements for composting toilets and systems that use water or other liquids as a transport medium; and
- Establish requirements for sanitary dump stations that receive the wastes from the holding tanks of travel trailers and such.
- Mandate the use of water softeners that are used primarily for water hardness reduction to be of a demand initiated regeneration type when the brine solution is discharged to a private onsite wastewater treatment system.

Chapter Comm 83, Private onsite Wastewater Treatment Systems; The chapter has been completely rewritten; the outline for the new chapter is:

Ch. Comm 83
Subchapter I SCOPE AND APPLICATION
- Comm 83.01 Purpose
- Comm 83.02 Scope
- Comm 83.03 Application
- Comm 83.04 Implementation
- Comm 83.05 Installation and Inspection Training

Subchapter II ADMINISTRATION AND ENFORCEMENT
- Comm 83.20 Purpose
- Comm 83.21 Sanitary Permits
- Comm 83.22 Plan Review and Approval
- Comm 83.23 Review Agent Status
- Comm 83.24 Petitions for Variance
- Comm 83.25 Governmental Programs
- Comm 83.26 Inspections and Testing
- Comm 83.27 Experimental POWTS
- Comm 83.28 Penalties
- Comm 83.29 Range of Responses

Subchapter III GENERAL REQUIREMENTS
- Comm 83.30 Purpose
- Comm 83.31 Principles
- Comm 83.32 Prohibitions and Limitations
- Comm 83.33 Abandonment

Subchapter IV DESIGN AND INSTALLATION
- Comm 83.40 Purpose
- Comm 83.41 Principles
- Comm 83.42 Application
- Comm 83.43 General Requirements
- Comm 83.44 Parameters for POWTS Components Consisting of In Situ Soil
- Comm 83.45 Installation

Subchapter V MANAGEMENT
- Comm 83.50 Purpose
- Comm 83.51 Principles
- Comm 83.52 Responsibilities
- Comm 83.53 General
- Comm 83.54 Management Requirements
- Comm 83.55 Reporting Requirements

Subchapter VI RECOGNIZED METHODS AND TECHNOLOGIES
- Comm 83.60 Purpose
- Comm 83.61 Acceptable Methods and Technologies
- Comm 83.62 Parameters for Using Acceptable Methods and Technologies

Subchapter VII DEPARTMENT PERFORMANCE MONITORING
Comm 83.70 Purpose
Comm 83.71 Department Procedures

Unlike the current chapter, the revised ch. Comm 83 does not dictate or prioritize specific solutions or the selection of systems; rather, the chapter delineates the critical factors, parameters, options, prohibitions and limitations for the design of private onsite wastewater treatment systems. Under the framework of chapter Comm 83 designers and owners would be allowed to choose the appropriate method for reducing the contaminant loads and dispersing the hydraulic flows by selecting and arranging prerecognized treatment components, single use designs, and other means in conjunction with site limitations for a particular project.

The revisions under chapter Comm 83, include:

- Numerical standards for system design and operation relative to fecal coliform, suspended solids, biological oxygen demand, fats, grease, oil and particle size;

- Requirements to obtain plan approval and a sanitary permit before the installation of a private onsite wastewater treatment system may begin; local governmental units would still be required to review plans employing "conventional" technology for residential projects while plans for commercial projects or projects employing technologies not previously recognized would be reviewed by the department. Plans using other types of "prerecognized" solutions would be reviewed by either the local governmental unit or the department depending upon where the submitter wanted the service to be performed and if the local government unit had opted to provide this service as an agent of the department;

- The testing of components before the system is put into service;

- A reference to the petition for variance process, chapter Comm 3, whereby an equivalent alternative that meets the intent of a rule but not the letter may be recognized - the petition for variance process is not to waive compliance and does not supersede statutory requirements or local ordinances;

- The allowance for local governmental units, by ordinance, to delay the implementation of some technologies upon the adoption of the code and to prohibit or limit the use of holding tanks, or constructed wetlands or evapotranspiration beds as POWTS treatment components;

- The prohibition of cesspools and outfall pipes discharging sewage to the surface, including existing installations;

- Design standards that:
  - Delineate the contaminant loads and hydraulic flows for residential occupancies based on bedrooms and occupants and for other occupancies based upon estimated wastewater flows;
  - Allow for the segregation of graywater and blackwater wastes and designs to deal with each;
  - Specify parameters for subsurface treatment and dispersal;
  - Recognize that treatment components may be installed inside buildings provided the components are gas-tight, and pose no health or safety risk to occupants.

- The establishment of an electronic maintenance tracking scheme that would monitor the required periodic maintenance of private onsite wastewater treatment systems depending upon the type of technology employed; the maintenance service parameters would be established during either product review or plan review; the maintenance tracking system would allow regulatory agencies and the department to focus their enforcement activities; the maintenance tracking scheme would be expanded to include existing holding tanks; and

- The recognition that responsibility to operate and maintain a private onsite wastewater treatment system in accordance with its approval is assigned to the owner and the failure to report required maintenance would be considered a violation of the code and a "human health hazard" allowing possible direct intervention to correct the situation.

Chapter Comm 84 Plumbing Products; The revisions under this chapter:

- Require department approval of all prefabricated treatment components to be employed in a private onsite wastewater treatment system to recognize the performance capabilities of the components through the department's product approval process; product approvals are valid for 5 years and may be revised and renewed at the option of the submitter and may be rescinded by the department; the department's approval and recognition is determined with respect to the requirements and standards delineated in the plumbing code;

- Establish the voluntary submission and the department's recognition of system design solutions, treatment and dispersal, as private onsite wastewater treatment systems thereby facilitating the design process and the plan review process; the review of such submissions would entail the input of a technical advisory committee comprised of interested parties involved in private onsite wastewater treatment systems;

- Establish performance and specification requirements for treatment and holding components; and

- Establish performance and specification requirements for geotextile fabrics used in private onsite wastewater treatment systems to prevent backfill material from entering absorption areas.

Chapter Comm 85 Soil and Site Evaluations; This chapter currently addresses the proposed creation of subdivisions that are not to be served by public sewers and reflects the department's regulatory involvement under ch. 236, Stats. The department's role under ch. 236, Stats., is to facilitate the planning of adequate sewage disposal for new subdivisions. The department proposes to reduce its regulatory involvement in the present plat review process believing that the process is premature and duplicative. Premature in that a type of system is preselected and assigned to a site without knowing the type of building to be served and its wastewater needs or the preferences of the owner; duplicative in that plans for a private onsite wastewater treatment system will still be required to be submitted and approved for each project. Under s. 236.45, Stats., local governmental units will still be able to facilitate and regulate subdivisions relative to a wide variety of land use issues including sewerage.

The rewritten chapter will focus on providing consistent high quality soil and site data which may be used as the basis for selecting and designing a solution to address a project's wastewater management needs. Even though chapter Comm 83 does not dictate or prioritize specific solutions the data gathered from soil and site evaluations must be of such quality as to document the site's limitations or abilities to support the proposed design during the plan review process. The rules of this chapter will no longer require the soil tester to recommend a system type for a site. The selection of the design is the decision of the owner in consultation with the designer, soil tester, installer and other parties involved in the POWTS design process.

Chapter Comm 91 Sanitation; The newly created chapter is not part of the plumbing code and establishes minimum standards for the design, installation and maintenance of sanitation systems and devices which are alternatives to traditional plumbing fixtures and systems. The chapter covers composting toilets and systems, incinerating toilets, privies and portable restrooms. Local governmental units would be able to enact more stringent requirements or use limitations for these types of sanitation systems.

Pursuant to s. 160.19 (2) (b), Stats., the department has determined that the proposed rules under ch. Comm 83 and the rules under previous editions of ch. Comm 83 which govern existing private onsite wastewater treatment do not result in compliance with the preventive action limits under ch. NR 140 at a point of standards application for chlorides. The department has concluded that it is not technically or economically feasible to reduce chlorides to the preventive action limits. The principle contributor of chlorides in the wastewater stream of residential occupancies is the use of water softeners. Anion exchange is the only chemical process capable of removing chloride from water. The physical processes of removing chloride, such as evaporation and reverse osmosis, would separate feedwater into two streams, one with a reduced chloride content and the other with an increased chloride content, and results in still having to treat and dispose of chloride contaminated wastewater.

Also under s. 160.255, Stats., private sewage systems are exempted from meeting the NR 140 nitrate standards by s. 160.255, Stats., because of this legislative direction, nitrate standards were not included as part of the rules under ch. Comm 83.

SECTION 1. Comm 2.52 (5) is repealed and recreated to read:

Comm 2.52 (5) PETITIONS FOR VARIANCE ON RULES UNDER CHS. Comm 81 TO 85, UNIFORM PLUMBING CODE. The fee per petition for processing petitions for variance to rules under chs. Comm 81 to 85 shall be $225.00.

SECTION 2. Comm 2.61 (3) is repealed and recreated to read:

Comm 2.61 (3) PRIORITY PLAN REVIEW. (a) A submitter of plans for plumbing or private onsite wastewater treatment systems may request and make an appointment with the department to facilitate the review of the plans on a priority basis.

(b) The fee for plan review on a priority basis shall be twice the rate as determined under Tables 2.64-1, 2.64-2 or 2.65.

(c) The scheduling of a plan review on a priority basis shall be contingent upon the department having sufficient time and staff to accommodate the request.

SECTION 3. Comm 2.63 is repealed.

SECTION 4. Comm 2.65 and Table 2.65 are repealed and recreated to read:

Comm 2.65 PRIVATE ONSITE WASTEWATER TREATMENT SYSTEMS. (1) GENERAL. The plan examination fee as determined under this section shall accompany the plans and specifications for the proposed design of a private onsite wastewater treatment system at a specific site. If the department determines, upon review of the plans, that inadequate fees were provided, the department will not make a final determination on the plans until the appropriate fees are received.

(2) EXAMINATION FEES. The plan examination fee for a private onsite wastewater treatment system submitted to the department for review shall be determined in accordance with Table 2.65, rounded to the nearest dollar.

Table 2.65
Plan Review
Private Onsite Wastewater Treatment Systems

Type of Project	Fee
1. All treatment components are approved under s. Comm 84.10 (2) or (3):	
Design wastewater flow of the proposed system:	
1,000 gpd or less	$175.00
1,001 - 2,000 gpd	$225.00
2,001 - 5,000 gpd	$275.00
greater than 5,000 gpd	$300.00 plus $0.05/g/d
2. One or more treatment components are not approved under s. Comm 84.10 (2) or (3):	
Design wastewater flow of the proposed system:	
1,000 gpd or less	$300.00
1,001 - 2,000 gpd	$400.00
2,001 - 5,000 gpd	$500.00
greater than 5,000 gpd	$600.00 plus $0.05/g/d
3. Holding tanks approved under s. Comm 84.10 (2) or (3):	
Design wastewater flow of the proposed system:	
5,000 gpd or less	$60.00
5,001 - 10,000 gpd	$100.00
greater than 10,000 gpd	$150.00
4. Holding tanks not approved under s. Comm 84.10 (2) or (3):	
Design wastewater flow of the proposed system:	
5,000 gpd or less	$120.00
5,001 - 10,000 gpd	$200.00
greater than 10,000 gpd	$300.00

(3) DATA REVIEW. The fee to review soil saturation monitoring studies or reports in accordance with s. Comm 85.60 (2) or (3) shall be $100.00 per site.

SECTION 5. Comm 2.66 Table 2.66 line 5 is amended to read:

Table 2.66
(partial table)

Product		Fee	
		Type of Review	
		New Review	Revision or Renewal
5.	Prefabricated ~~exterior grease interceptor, holding or septic tank~~ holding or treatment components for private onsite wastewater treatment systems	~~$100~~ $200	~~$50~~ $100

SECTION 6. Comm 2.66 (1) (d) 2. is amended to read:

Comm 2.66 (1) (d) 2. The fee for the request of a revision or renewal of an experimental approval to be issued by the department for a plumbing material or product shall be $250.00.

SECTION 7. Comm 2.66 (2) (a) is repealed and recreated to read:

Comm 2.66 (2) (a) The fee for the request to have a method or technology reviewed as a POWTS holding, treatment or dispersal component or site constructed private onsite wastewater treatment system component by the department, in accordance with s. Comm 84.10 (3), shall be $300.00 per method, technology, or site constructed component.

SECTION 8. Comm 2.67 (1) is renumbered 2.67 (1) (a) and amended to read:

Comm 2.67 (1) FEE. (a) ~~The~~ Pursuant to s. 145.19 (5), Stats., the fee for a sanitary permit ~~determined in accordance with s. 145.19, Stats.,~~ issued by a governmental unit shall be at least ~~$91.00~~ $116.00.

Note: The sanitary permit fee includes a $25.00 groundwater fee, required by s. 145.19 (6), Stats., that is forwarded by the department of commerce to the department of natural resources.

SECTION 9. Comm 2.67 (1) (b) is created to read:

Comm 2.67 (1) (b) The fee for a sanitary permit issued by the department under s. Comm 83.21 shall be $200.00.

SECTION 10. Comm 2.67 (2) is amended to read:

Comm 2.67 (2) PORTION FORWARDED TO THE DEPARTMENT. The governmental unit responsible for the regulation of private ~~sewage~~ onsite wastewater treatment systems shall forward to the department ~~$50.00~~ $75.00 of each sanitary permit fee, determined in accord with s. 145.19, Stats.

Note: The $75.00 includes the $25.00 groundwater fee, required by s. 145.19 (6), Stats., that is forwarded to the department of natural resources.

SECTION 11. Comm 5.02 Table 5.02 lines 18 to 65 are renumbered lines 19 to 66.

SECTION 12. Comm 5.02 Table 5.02 line 18 is created to read:

Table 5.02
FEES
(partial table)

	License, Certification or Registration Category	Type	Application Fee	Examination Fee	License, Certification or Registration Fee
18.	POWTS Maintainer	Registration	$10	NA	$30

SECTION 13. Comm 5.06 Table 5.06 lines 18 to 65 are renumbered lines 19 to 66.

SECTION 14. Comm 5.06 Table 5.06 line 18 is created to read:

Table 5.06
EXPIRATIONS
(partial table)

	License, Certification or Registration Category	Term	Expiration Date	Continuing Education Cycle
18.	POWTS Maintainer	2 years	Date of Issuance	3 Months Prior to Date of Issuance

SECTION 15. Comm 5.36 is created to created:

Comm 5.36 POWTS MAINTAINERS. (1) GENERAL. Pursuant to s. Comm 83.52 (3), a person who holds a registration issued by the department as a registered POWTS maintainer may evaluate and monitor POWTS components for the purpose of providing the management of a POWTS under ch. Comm 83 subch. V.

(2) APPLICATION FOR REGISTRATION. A person applying for a POWTS maintainer registration shall submit all of the following:

(a) An application in accordance with s. Comm 5.01.

(b) An application and registration fee in accordance with s. Comm 5.02, Table 5.02.

(c) Information or documentation relating to the qualifications under sub. (3).

(3) QUALIFICATIONS FOR REGISTRATION. A person applying for a POWTS maintainer registration shall have completed or obtained at least one of the following:

(a) At least 6 hours in a course or courses approved under s. Comm 5.08 that relate to the theory, operation, maintenance and inspection of POWTS treatment and dispersal components, including instruction in at least all of the following:

1. Sand filters.

2. Effluent pumps and switches.

3. Alarms and floats.

4. Active filtration devices.

5. Valves and solenoids for distributing effluent.

6. Aerobic treatment units.

(b) At least 60 hours of experience as a licensed master plumber, master plumber-restricted service, journeyman plumber or journeyman plumber-restricted service installing POWTS treatment and dispersal components that involve installation of at least all of devices delineated under par. (a) 1. to 6.

(4) RENEWAL. (a) 1. A person may renew his or her registration as POWTS maintainer.

2. A POWTS maintainer registration shall be renewed in accordance with s. Comm 5.07.

(b) 1. The renewal of a registration as a POWTS maintainer shall be contingent upon the maintainer obtaining at least 6 hours of acceptable continuing education within the time period specified in s. Comm 5.08 and Table 5.06, except as provided in subd. 2.

2. A person who holds a registration as a POWTS maintainer may apply to the department for waiver of the continuing education requirements under subd. 1. on the grounds of prolonged illness or disability or similar circumstances. Each application for waiver shall be considered individually on its merits by the department.

SECTION 16. Comm 20.07 (19m), (40t) and (59t) are created to read:

Comm 20.07 (19m) "Composting toilet system" means a method that collects, stores and converts by bacterial digestion nonliquid-carried human wastes or organic kitchen wastes, or both, into humus.

(40t) "Incinerating toilet" means a self-contained device for the treatment of nonliquid carried wastes that deposits the wastes directly into a combustion chamber, reduces the solid portion to ash and evaporates the liquid portion.

(59t) "Privy" means an enclosed nonportable toilet into which nonwater-carried human wastes are deposited to a subsurface storage chamber.

SECTION 17. Comm 20.09 (5) (b) 2 Note is repealed.

SECTION 18. Comm 20.09 (5) (b) 3 is created to read:

Comm 20.09 (5) (b) 3. Pursuant to s. 66.036, Stats., if the proposed construction requires connection to a private onsite wastewater treatment system, a Wisconsin uniform building permit may not be issued unless conformance with s. Comm 83.25 (2) has first been determined.

Note: See appendix for a reprint of s. Comm 83.25 (2).

SECTION 19. Comm 25.02 is created to read:

Comm 25.02 SANITATION FACILITIES AND DEVICES. The design, construction, installation and maintenance of sanitation facilities and devices such as composting toilets, incinerating toilets and privies to serve one- and 2-family dwellings shall comply with the requirements of ch. Comm 91.

SECTION 20. Appendix Comm 20.09 is created to read:

Section Comm 20.09 (5) (b) 1. refers to s. Comm 83.25 (2), which reads as follows:

Comm 83.25 (2) ISSUANCE OF BUILDING PERMITS. (a) General. Pursuant to s. 66.036, Stats., the issuance of building permits by a municipality for unsewered properties shall be in accordance with this subsection.

(b) New construction. A municipality may not issue a building permit to commence construction or installation of a structure that necessitates the use of a POWTS to serve the structure, unless:

1. The owner of the property possesses a sanitary permit for the installation of a POWTS in accordance with s. Comm 83.21; or

Note: Section Comm 83.21 outlines the procedures for the issuance of sanitary permits. Sections 145.135 and 145.19, Stats., mandate that no private sewage system may be installed unless the owner of the property holds a valid sanitary permit.

2. A POWTS of adequate capability and capacity to accommodate the wastewater flow and contaminant load already exists to serve the structure.

Note: See ss. Comm 83.02 and 83.03 concerning the application of current code requirements to existing POWTS.

(c) Construction affecting wastewater flow or contaminant load. 1. A municipality may not issue a building permit to commence construction of any addition or alteration to an existing structure when the proposed construction will modify the design wastewater flow or contaminant load, or both, to an existing POWTS, unless the owner of the property:

a. Possesses a sanitary permit to either modify the existing POWTS or construct a POWTS to accommodate the modification in wastewater flow or contaminant load, or both; or

b. Provides documentation to verify that the existing POWTS is sufficient to accommodate the modification in wastewater flow or contaminant load, or both.

2. For the purpose of this paragraph, a modification in wastewater flow or contaminant load shall be considered to occur:

a. For commercial facilities, public buildings, and places of employment, when there is a proposed change in occupancy of the structure; or the proposed modification affects either the type or number of plumbing appliances, fixtures or devices discharging to the system; and

b. For dwellings, when there is an increase or decrease in the number of bedrooms.

(d) Documentation of existing capabilities. Documentation to verify whether an existing POWTS can accommodate a modification in wastewater flow or contaminant load, or both, shall include at least one of the following:

1. A copy of the plan for the existing POWTS that delineates minimum and maximum performance capabilities and which has been previously approved by the department or the governmental unit.

2. Information on the performance capabilities for the existing POWTS that has been recognized through a product approval under ch. Comm 84.

3. A written investigative report prepared by an architect, engineer, designer of plumbing systems, designer of private sewage systems, master plumber, master plumber-restricted service or certified POWTS inspector analyzing the proposed modification and the performance capabilities of the existing POWTS.

(e) Setbacks. 1. A municipality may not issue a building permit for construction of any structure or addition to a structure on a site where there exists a POWTS, unless the proposed construction conforms to the applicable setback limitations under s. Comm 83.43 (8) (i).

2. The applicant for a building permit shall provide documentation to the municipality issuing the building permit showing the location and setback distances for the proposed construction relative to all of the following:

a. Existing POWTS treatment components.

b. Existing POWTS holding components.

c. Existing POWTS dispersal components.

Note: A municipality which issues building permits may delegate to the governmental unit responsible for issuing sanitary permits the determination of whether the proposed construction will affect or interfere with an existing POWTS relating to capability or location of the existing POWTS.

SECTION 21. Comm 50.06 (3) is created to read:

Comm 50.06 (3) ISSUANCE OF BUILDING PERMITS. Pursuant to s. 66.036, Stats., if the proposed construction requires connection to a private onsite wastewater treatment system, a local building permit may not be issued unless conformance with s. Comm 83.25 (2) has first been determined.

Note: See appendix for a reprint of s. Comm 83.25 (2).

SECTION 22. Comm 51.01 (19m) is created to read:

Comm 51.01 (19m) "Composting toilet system" means a method that collects, stores and converts by bacterial digestion nonliquid-carried human wastes or organic kitchen wastes, or both, into humus.

SECTION 23. Comm 51.01 (71p) is renumbered 51.01 (71t).

SECTION 24. Comm 51.01 (71p) is created to read:

Comm 51.01 (71p) "Incinerating toilet" means a self-contained device for the treatment of nonliquid carried wastes that deposits the wastes directly into a combustion chamber, reduces the solid portion to ash and evaporates the liquid portion.

SECTION 25. Comm 51.01 (103d) is created to read:

Comm 51.01 (103d) "Portable restroom" means a self-contained portable unit that includes fixtures, incorporating holding tank facilities, designed to receive human excrement.

SECTION 26. Comm 51.01 (103g) is repealed and recreated to read:

Comm 51.01 (103g) "Privy" means an enclosed nonportable toilet into which nonwater-carried human wastes are deposited to a subsurface storage chamber.

SECTION 27. Comm 52.60 (1) (a) (intro.) is amended to read:

Comm 52.60 (1) (a) Except as ~~permitted in par. (b)~~ provided in pars. (b) and (c), all water closets required to be provided in public buildings and places of employment shall:

SECTION 28. Comm 52.60 (1) (c) is created to read:

Comm 52.60 (1) (c) A composting toilet system complying with s. Comm 91.10 or an incinerating toilet complying with s. Comm 91.11 may be substituted for any water closet.

SECTION 29. Comm 52.61 is repealed and recreated to read:

Comm 52.61 PROTECTION FROM FREEZING. All portions of plumbing water supply systems shall be protected against freezing in accordance with s. Comm 82.40 (8) (a).

SECTION 30. Comm 52.62 (1) (a) and Note are repealed and recreated to read:

Comm 52.62 (1) (a) A private onsite wastewater treatment system, POWTS; or

Note: For detailed requirements on POWTS see ch. Comm 83.

SECTION 31. Comm 52.62 (1) (b) is amended to read:

Comm 52.62 (1) (b) Where the local conditions or situations make it impractical to install ~~such~~ a ~~system~~ POWTS, permanent or portable outdoor toilets, as described in s. Comm 52.63, or other ~~facilities~~ sanitation systems or devices, ~~such~~ as ~~septic toilets installed in accordance with the provisions of the state plumbing code, chs. Comm 82 to 87~~ described in ch. Comm 91, may be used; provided that in the case of places of employment for more than 10 persons, schools larger than 2 rooms, and apartment houses, water-flush toilets as herein described shall be provided, unless outdoor toilets or other ~~facilities~~ sanitation systems or devices are permitted in writing by the department.

SECTION 32. Comm 52.63 is repealed and recreated to read:

Comm 52.63 PERMANENT AND PORTABLE OUTDOOR TOILETS. (1) PERMANENT OUTDOOR TOILETS. (a) Permanent outdoor toilets consisting of composting toilet systems, incinerating toilets, or privies shall comply with ss. Comm 52.50 to 52.59 and ch. Comm 91.

(b) A permanent outdoor toilet shall be provided with a suitable approach, such as a concrete, gravel or cinder walk.

(c) All windows, ventilators and other openings of permanent outdoor toilets shall be screened to prevent the entrance of flies, and all doors shall be self-closing.

Note: Chapter Comm 91 contains requirements for the design, construction, installation and maintenance of the storage chambers for privies.

(2) PORTABLE RESTROOMS. (a) No portable restroom may be erected or maintained within 50 feet of any well, 10 feet of the line of any street or public thoroughfare, unless vehicular traffic has been temporarily detoured while the portable restroom is in use, 5 feet of the property line between premises or 25 feet of a door, window or other outdoor openings of any building.

(b) A portable restroom shall be stabilized to prevent the unit from tipping over.

(c) A portable restroom shall be located with an approach such that access is unobstructed, and free of brush, debris and standing water.

(d) For specialty event centers without permanent sanitary fixtures in numbers as required under s. Comm 62.992 (2), portable restrooms may be used to meet the number required for the event, using capacity or seating capacity.

Note 1. Chapter Comm 91 contains requirements for the storage chamber of portable restrooms into which human waste is to be deposited.

Note 2. The servicing and disposal of the contents of portable restrooms is addressed under chs. NR 113 and 114.

SECTION 33. Comm A-50.06 (3) in the appendix is created to read:

Comm A-50.06 (3) ISSUANCE OF BUILDING PERMITS. Section Comm 50.06 (3) refers to s. Comm 83.25 (2), which reads as follows:

Comm 83.25 (2) ISSUANCE OF BUILDING PERMITS. (a) General. Pursuant to s. 66.036, Stats., the issuance of building permits by a municipality for unsewered properties shall be in accordance with this subsection.

(b) New construction. A municipality may not issue a building permit to commence construction or installation of a structure that necessitates the use of a POWTS to serve the structure, unless:

1. The owner of the property possesses a sanitary permit for the installation of a POWTS in accordance with s. Comm 83.21; or

Note: Section Comm 83.21 outlines the procedures for the issuance of sanitary permits. Sections 145.135 and 145.19, Stats., mandate that no private sewage system may be installed unless the owner of the property holds a valid sanitary permit.

2. A POWTS of adequate capability and capacity to accommodate the wastewater flow and contaminant load already exists to serve the structure.

Note: See ss. Comm 83.02 and 83.03 concerning the application of current code requirements to existing POWTS.

(c) Construction affecting wastewater flow or contaminant load. 1. A municipality may not issue a building permit to commence construction of any addition or alteration to an existing structure when the proposed construction will modify the design wastewater flow or contaminant load, or both, to an existing POWTS, unless the owner of the property:

a. Possesses a sanitary permit to either modify the existing POWTS or construct a POWTS to accommodate the modification in wastewater flow or contaminant load, or both; or

b. Provides documentation to verify that the existing POWTS is sufficient to accommodate the modification in wastewater flow or contaminant load, or both.

2. For the purpose of this paragraph, a modification in wastewater flow or contaminant load shall be considered to occur:

a. For commercial facilities, public buildings, and places of employment, when there is a proposed change in occupancy of the structure; or the proposed modification affects either the type or number of plumbing appliances, fixtures or devices discharging to the system; and

b. For dwellings, when there is an increase or decrease in the number of bedrooms.

(d) Documentation of existing capabilities. Documentation to verify whether an existing POWTS can accommodate a modification in wastewater flow or contaminant load, or both, shall include at least one of the following:

1. A copy of the plan for the existing POWTS that delineates minimum and maximum performance capabilities and which has been previously approved by the department or the governmental unit.

2. Information on the performance capabilities for the existing POWTS that has been recognized through a product approval under ch. Comm 84.

3. A written investigative report prepared by an architect, engineer, designer of plumbing systems, designer of private sewage systems, master plumber, master plumber-restricted service or certified POWTS inspector analyzing the proposed modification and the performance capabilities of the existing POWTS.

(e) Setbacks. 1. A municipality may not issue a building permit for construction of any structure or addition to a structure on a site where there exists a POWTS, unless the proposed construction conforms to the applicable setback limitations under s. Comm 83.43 (8) (i).

2. The applicant for a building permit shall provide documentation to the municipality issuing the building permit showing the location and setback distances for the proposed construction relative to all of the following:

a. Existing POWTS treatment components.

b. Existing POWTS holding components.

c. Existing POWTS dispersal components.

Note: A municipality which issues building permits may delegate to the governmental unit responsible for issuing sanitary permits the determination of whether the proposed construction will affect or interfere with an existing POWTS relating to capability or location of the existing POWTS.

SECTION 34. Comm 66.11 Note 2 is repealed.

SECTION 35. Comm 66.11 is renumbered 66.11 (1).

SECTION 36. Comm 66.11 (2) is created to read:

Comm 66.11 (2) Pursuant to s. 66.036, Stats., if the proposed construction requires connection to a private onsite wastewater treatment system, a Wisconsin uniform multifamily building permit may not be issued unless conformance with s. Comm 83.25 (2) has first been determined.

Note: See Appendix A for a reprint of s. Comm 83.25 (2).

SECTION 37. Comm A-66.11 (2) in the appendix is created to read:

Comm A-66.11 (2) BUILDING PERMITS. Section Comm 66.11 (2) refers to s. Comm 83.25 (2), which reads as follows:

Comm 83.25 (2) ISSUANCE OF BUILDING PERMITS. (a) General. Pursuant to s. 66.036, Stats., the issuance of building permits by a municipality for unsewered properties shall be in accordance with this subsection.

(b) New construction. A municipality may not issue a building permit to commence construction or installation of a structure that necessitates the use of a POWTS to serve the structure, unless:

1. The owner of the property possesses a sanitary permit for the installation of a POWTS in accordance with s. Comm 83.21; or

Note: Section Comm 83.21 outlines the procedures for the issuance of sanitary permits. Sections 145.135 and 145.19, Stats., mandate that no private sewage system may be installed unless the owner of the property holds a valid sanitary permit.

2. A POWTS of adequate capability and capacity to accommodate the wastewater flow and contaminant load already exists to serve the structure.

Note: See ss. Comm 83.02 and 83.03 concerning the application of current code requirements to existing POWTS.

(c) Construction affecting wastewater flow or contaminant load. 1. A municipality may not issue a building permit to commence construction of any addition or alteration to an existing structure when the proposed construction will modify the design wastewater flow or contaminant load, or both, to an existing POWTS, unless the owner of the property:

a. Possesses a sanitary permit to either modify the existing POWTS or construct a POWTS to accommodate the modification in wastewater flow or contaminant load, or both; or

b. Provides documentation to verify that the existing POWTS is sufficient to accommodate the modification in wastewater flow or contaminant load, or both.

2. For the purpose of this paragraph, a modification in wastewater flow or contaminant load shall be considered to occur:

a. For commercial facilities, public buildings, and places of employment, when there is a proposed change in occupancy of the structure; or the proposed modification affects either the type or number of plumbing appliances, fixtures or devices discharging to the system; and

b. For dwellings, when there is an increase or decrease in the number of bedrooms.

(d) Documentation of existing capabilities. Documentation to verify whether an existing POWTS can accommodate a modification in wastewater flow or contaminant load, or both, shall include at least one of the following:

1. A copy of the plan for the existing POWTS that delineates minimum and maximum performance capabilities and which has been previously approved by the department or the governmental unit.

2. Information on the performance capabilities for the existing POWTS that has been recognized through a product approval under ch. Comm 84.

3. A written investigative report prepared by an architect, engineer, designer of plumbing systems, designer of private sewage systems, master plumber, master plumber-restricted service or certified POWTS inspector analyzing the proposed modification and the performance capabilities of the existing POWTS.

(e) Setbacks. 1. A municipality may not issue a building permit for construction of any structure or addition to a structure on a site where there exists a POWTS, unless the proposed construction conforms to the applicable setback limitations under s. Comm 83.43 (8) (i).

2. The applicant for a building permit shall provide documentation to the municipality issuing the building permit showing the location and setback distances for the proposed construction relative to all of the following:

a. Existing POWTS treatment components.

b. Existing POWTS holding components.

c. Existing POWTS dispersal components.

Note: A municipality which issues building permits may delegate to the governmental unit responsible for issuing sanitary permits the determination of whether the proposed construction will affect or interfere with an existing POWTS relating to capability or location of the existing POWTS.

SECTION 38. Chapter Comm 81 is created to read:

Chapter Comm 81

DEFINITIONS AND STANDARDS

Comm 81.01 DEFINITIONS. In chs. Comm 81 to 87, except as otherwise specifically defined:

(1) "Accepted engineering practice" means a specification, standard, guideline or procedure in the field of plumbing or related thereto, generally recognized and accepted as authoritative documented through national standards or specifications.

(2) "Accessible" when applied to a fixture, appliance, pipe, fitting, valve or equipment, means having access for maintenance, but which first may require the removal of an access panel or similar obstruction.

(3) "Aerobic treatment component" means a unit for the treatment of wastewater that utilizes the principle of oxidation for biological decomposition.

(4) "Agent" means an individual or agency recognized by the department to act on the department's behalf relative to a specific activity or function.

(5) "Air-break" means a piping arrangement for a drain system where the wastes from a fixture, appliance, appurtenance or device discharge by means of indirect or local waste piping terminating in a receptor at a point below the flood level rim of the receptor and above the inlet of the trap serving the receptor.

(6) "Air-gap, drain system" means the unobstructed vertical distance through the free atmosphere between the outlet of indirect or local waste piping and the flood level rim of the receptor into which it discharges.

(7) "Air-gap, water supply system" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank or plumbing fixture and the flood level rim or spill level of the receptacle.

(8) "Anaerobic treatment component" means a unit for the treatment of wastewater which utilizes molecular oxygen in the absence of free oxygen for biological respiration and decomposition.

(9) "Approved" means acceptance documented in writing by the department.

(10) "Appurtenance" means a manufactured device or prefabricated assembly of component parts which is an adjunct to a plumbing product or plumbing system.

(11) "Area drain" means a receptor designed to collect storm waters from an open area.

(12) "Areawide water quality management plan" means those plans prepared by the department of natural resources, including those plans prepared by agencies designated by the governor under the authority of ss. 281.11, 281.12 (1), 281.15, and 283.83, Stats., for the purpose of managing, protecting and enhancing groundwater and surface water of the state.

Note: See ch. Comm 82 Appendix for a list of water quality management agencies and their addresses.

(13) "Aspirator" means a fitting or device supplied with water or other fluid under positive pressure which passes through an integral orifice or constriction causing a vacuum.

(14) "Autopsy table" means a fixture or table used for post-mortem examination.

(15) "Automatic fire sprinkler system" has the meaning specified under s. 145.01 (2), Stats.

Note: Section 145.01 (2), Stats., reads: "Automatic fire sprinkler system," for fire protection purposes, means an integrated system of underground and overhead piping designed in accordance with fire protection engineering standards. The system includes a suitable water supply, such as a gravity tank, fire pump, reservoir or pressure tank or connection beginning at the supply side of an approved gate valve located at or near the property line where the pipe or piping system provides water used exclusively for fire protection and related appurtenances and to standpipes connected to automatic sprinkler systems. The portion of the sprinkler system above ground is a network of specially sized or hydraulically designed piping installed in a building, structure or area, generally overhead, and to which sprinklers are connected in a systematic pattern. The system includes a controlling valve and a device for actuating an alarm when the system is in operation. The system is usually activated by heat from a fire and discharges water over the fire area.

(16) "Backflow" means the unwanted reverse flow of liquids, solids or gases.

(17) "Back pressure" means a pressure greater than the supply pressure that may cause backflow.

(18) "Backflow preventer with intermediate atmospheric vent" means a type of cross connection control device which consists of 2 independently acting check valves, internally force-loaded to a normally closed position and separated by an intermediate chamber with a means for automatically venting to atmosphere where the venting means is internally force-loaded to a normally open position.

(19) "Back siphonage" means the creation of a backflow as a result of negative pressure.

(20) "Back siphonage backflow vacuum breaker" means a type of cross connection control device which contains a check valve force-loaded closed and an air inlet vent valve force-loaded open to atmosphere, positioned downstream of the check valve, and located between and including 2 tightly closing shut-off valves and 2 test cocks.

(21) "Backwater valve" means a device designed to prevent the reverse flow of wastewater in a drain system.

(22) "Ballcock" means a water supply valve opened or closed by means of a float or similar device used to supply water to a tank.

(23) "Bathroom group" means a water closet, lavatory and a bathtub or shower located together on the same floor level.

(24) "Battery of fixtures" means any group of 2 or more fixtures that discharge into the same horizontal branch drain.

(25) "Bedpan sterilizer" means a fixture used for sterilizing bedpans or urinals by direct application of steam, boiling water or chemicals.

(26) "Bedpan washer and sanitizer" means a fixture designed to wash bedpans and to flush the contents into the sanitary drain system and which may also provide for disinfecting utensils by scalding with steam or hot water.

(27) "Bedpan washer hose" means a device supplied with hot or cold water, or both, and located adjacent to a water closet or clinical sink to be used for cleansing bedpans.

(28) "Bedrock" means rock that is exposed at the earth's surface or underlies soil material and includes:

(a) Weathered in-place consolidated material, larger than 2 mm in size and greater than 50% by volume; and

(b) Weakly consolidated sandstone at the point of increased resistance to penetration of a knife blade.

(29) "Bell" means the portion of a pipe that is enlarged to receive the end of another pipe of the same diameter for the purpose of making a joint.

(30) "Bench mark" or "BM" means a permanently established point, the elevation of which is assumed or known, which serves as a vertical reference point, and which may also serve as a horizontal reference point.

(31) "Blackwater" means wastewater contaminated by human body waste, toilet paper and any other material intended to be deposited in a receptor designed to receive urine or feces.

(32) "BOD_5" or "biochemical oxygen demand 5 day" means a measure of the amount of biodegradable organic matter in water.

(33) "Boiler blow-off basin" means a vessel designed to receive the discharge from a boiler blow-off outlet and to cool the discharge to a temperature that permits safe entry into the drain system.

(34) "Branch" means a part of a piping system other than a riser, main or stack.

(35) "Branch interval" means the vertical distance along a drain stack measured from immediately below a branch drain connection to immediately below the first lower branch drain connection that is 8 feet or more below.

Note: See ch. Comm 82 Appendix for an illustration depicting branch intervals.

(36) "Branch vent" means a vent serving more than one fixture drain.

(37) "B.T.U." means British Thermal Units.

(38) "Building" means a structure for support, shelter or enclosure of persons or property.

(39) "Building drain" means horizontal piping within or under a building, installed below the lowest fixture or the lowest floor level from which fixtures can drain by gravity to the building sewer.

(40) "Building drain branch" means a fixture drain which is individually connected to a building drain and is vented by means of a combination drain and vent system.

(41) "Building drain, sanitary" means a building drain which conveys wastewater consisting in part of domestic wastewater.

(42) "Building drain, storm" means a building drain which conveys storm water wastes or clear water wastes, or both.

(43) "Building permit" means any written permission from a municipality that allows construction to commence on a structure.

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

(45) "Building sewer, sanitary" means a building sewer which conveys wastewater consisting in part of domestic wastewater.

(46) "Building sewer, storm" means a building sewer which conveys storm water wastes or clear water wastes, or both.

(47) "Building subdrain" means the horizontal portion of a drain system which does not flow by gravity to the building sewer.

(48) "Building subdrain branch" means a fixture drain which is individually connected to a building subdrain and is vented by means of a combination drain and vent system.

(49) "Burr" means a roughness or metal protruding from the walls of a pipe usually as the result of cutting the pipe.

(50) "Business establishment" means any industrial or commercial organization or enterprise operated for profit, including but not limited to a proprietorship, partnership, firm, business trust, joint venture, syndicate, corporation or association.

(51) "Camping unit transfer container" means a type of stationary holding tank used to collect and hold wastewater discharges generated by an individual camping trailer or recreational vehicle.

(52) "Catch basin" means a watertight receptacle built to arrest sediment of surface, subsoil or other waste drainage, and to retain oily or greasy wastes, so as to prevent their entrance into the building drain or building sewer.

(53) "Cesspool" means an excavation which receives domestic wastewater by means of a drain system without pretreatment of the wastewater and retains the organic matter and solids permitting the liquids to seep from the excavation.

(54) "Circuit vent" means a method of venting 2 to 8 traps or trapped fixtures without providing an individual vent for each trap or fixture.

(55) "Cleanout" means an accessible opening in a drain system used for the removal of obstructions.

(56) "Clear water wastes" means liquids other than storm water, having no impurities or where impurities are below a minimum concentration considered harmful by the department, including but not limited to noncontact cooling water and condensate drainage from refrigeration compressors and air conditioning equipment, drainage of water used for equipment chilling purposes and cooled condensate from steam heating systems or other equipment.

(57) "Cold water" means water at a temperature less than 85°F.

(58) "Combination fixture" means a fixture combining one sink and laundry tray or a 2- or 3-compartment sink or laundry tray in one unit.

(59) "Combination drain and vent system" means a specially designed system of drain piping embodying the wet venting of one or more fixtures by means of a common drain and vent pipe adequately sized to provide free movement of air in the piping.

(60) "Common vent" means a branch vent connecting at or downstream from the junction of 2 fixture drains and serving as a vent for those fixture drains.

(61) "Conductor" means a drain pipe inside the building which conveys storm water from a roof to the storm drain or storm sewer.

(62) "Contaminant load" means the concentrations of substances in a wastewater stream.

(63) "Corporation cock" means a valve:

(a) Installed in a private water main or a water service at or near the connection to a public water main; or

(b) Installed in the side of a forced main sewer to which a forced building sewer is connected.

(64) "Critical level" means the reference point on a vacuum breaker that must be submerged before backflow can occur. When the critical level is not indicated on the vacuum breaker, the bottom of the vacuum breaker shall be considered the critical level.

(65) "Cross connection" means a connection or potential connection between any part of a water supply system and another environment containing substances in a manner that, under any circumstances, would allow the substances to enter the water supply system by means of back siphonage or back pressure.

(66) "Cross connection control device" means any mechanical device which automatically prevents backflow from a contaminated source into a potable water supply system.

(67) "Curb stop" means a valve placed in a water service or a private water main, usually near the lot line.

(68) "Dead end" means a branch leading from a drain pipe, vent pipe, building drain or building sewer and terminating at a developed length of 2 feet or more by means of a plug, cap or other closed fitting.

(69) "Department" means the department of commerce.

(70) "Design wastewater flow" means 150% of the estimated wastewater flow generated by a dwelling, building or facility.

(71) "Determination of failure" has the meaning specified under s. 145.245 (1) (a), Stats.

Note: Section 145.245 (1) (a), Stats., reads: "Determination of failure" means any of the following:

1. A determination that a private sewage system is failing, according to the criteria under sub. (4), based on an inspection of the private sewage system by an employe of the state or a governmental unit who is certified to inspect private sewage systems by the department.

2. A written enforcement order issued under s. 145.02 (3) (f), 145.20 (2) (f) or 281.19 (2).

3. A written enforcement order issued under s. 254.59 (1) by a governmental unit.

(72) "Developed length" means the length of pipe line measured along the centerline of the pipe and fittings.

(73) "Diameter" means in reference to a pipe the nominal inside diameter of the pipe.

(74) "Disinfection unit" means a type of POWTS treatment component, excluding a soil-based POWTS treatment component, that utilizes a chemical or photoelectric process to reduce the wastewater fecal coliform contaminant load.

(75) "Dispersal zone" means a dimensional volume of in situ soil that receives wastewater for treatment or distributes final effluent for dispersal.

(76) "Distribution cell" means a dimensional zone that is part of a POWTS treatment or dispersal component where wastewater is disseminated into in situ soil or engineered soil.

(77) "Documented data" means data which is developed in accordance with scientifically valid analytical protocols including field trials where appropriate, is subjected to peer review, results from more than one study, and consistent with other credible research.

(78) "Domestic wastewater" means the type of wastewater, not including storm water, normally discharged from or similar to that discharged from plumbing fixtures, appliances and devices including, but not limited to sanitary, bath, laundry, dishwashing, garbage disposal and cleaning wastewaters.

(79) "Double check backflow prevention assembly" means a type of cross connection control device which is composed of 2 independently acting check valves internally force-loaded to a normally closed position, tightly closing shut-off valves located at each end of the assembly and fitted with test cocks.

(80) "Double check detector assembly backflow preventer" means a type of a double check backflow prevention assembly which includes a parallel flow meter to indicate leakage or unauthorized use of water downstream of the assembly.

Note: Downspout, see "leader".

(81) "Drain" means any pipe that carries wastewater or water-borne wastes.

(82) "Drain system" includes all the piping or any portion of the piping within public or private premises which conveys wastewater to a legal point of disposal, but does not include the mains of public sewer systems or a private onsite wastewater treatment system or public sewage treatment or disposal plant.

(83) "Dwelling" means a structure, or that part of a structure, which is used or intended to be used as a home, residence or sleeping place by one person or by 2 or more persons maintaining a common household, to the exclusion of all others.

(84) "Effluent" means liquid discharged from a POWTS treatment component.

(85) "Ejector" means an automatically operated device to elevate wastewater by the use of air under higher than atmospheric pressure.

(86) "Elevation" or "EL" means the vertical distance from the datum to a point under investigation.

(87) "Enforcement standard" or "ES" has the meaning specified under s. 160.01 (2), Stats.

Note: Section 160.01 (2), Stats., reads: "Enforcement standard" means a numerical value expressing the concentration of a substance in groundwater which is adopted under ss. 160.07 and 160.09.

(88) "Engineered soil" means a mineral product that is equivalent to in situ soil for which treatment capability has been credited under Table 83.44-3, or superior to in situ soil in its ability to treat or disperse domestic wastewater from a POWTS.

(89) "Engineered system" means a system designed to meet the intent of the code but not the enumerated specifications of the state plumbing code.

(90) "Estimated wastewater flow" means the typical quantity of domestic wastewater generated daily by a dwelling, building or facility.

(91) "Experimental system" means a type of plumbing system from which valid and reliable data are being sought to demonstrate compliance with the intent of chs. Comm 82 to 84.

(92) "Failing private onsite wastewater treatment system" has the meaning specified under s. 145.245 (4), Stats.

Note: Section 145.245 (4) reads: "Failing private sewage system" means a private sewage system which causes or results in any of the following conditions:

(a) The discharge of sewage into surface water or groundwater.

(b) The introduction of sewage into zones of saturation which adversely affects the operation of a private sewage system.

(c) The discharge of sewage to a drain tile or into zones of bedrock.

(d) The discharge of sewage to the surface of the ground.

(e) The failure to accept sewage discharges and backup of sewage into the structure served by the private sewage system.

(93) "Farm" means a parcel of 35 or more acres of contiguous land that is devoted primarily to agricultural use, as defined under s. 91.01 (1) and (5), Stats.

Note: Section 91.01 (1) and (5), Stats., reads: (1) "Agricultural use" means beekeeping; commercial feedlots; dairying; egg production; floricultural; fish or fur farming; forest and game management; grazing; livestock raising; orchards; plant greenhouses and nurseries; poultry raising; raising of grain, grass, mint and seed crops; raising of fruits, nuts and berries; sod farming; placing land in federal programs in return for payment in kind; owning land, at least 35 acres of which is enrolled in the conservation reserve program under 16 USC 3831 to 3836; participating in the milk production termination program under 7 USC 1446 (d); and vegetable raising.

(5) "Devoted primarily to agricultural use" means under agricultural use for at least 12 consecutive months during the preceding 36-month period.

(94) "Faucet" means a valve end of a water pipe by means of which water can be drawn from or held within the pipe.

(95) "Final effluent" means the effluent from the last POWTS treatment component.

(96) "Fixture drain" means the drain from a fixture to a junction with another drain pipe.

(97) "Fixture supply" means that portion of a water distribution system serving one plumbing fixture, appliance or piece of equipment.

(98) "Fixture supply connector" means that portion of water supply piping which connects a plumbing fixture, appliance or a piece of equipment to the water distribution system.

(99) Fixture unit, drainage" or "dfu" means a measure of the probable discharge into the drain system by various types of plumbing fixtures. The drainage fixture unit value for a particular fixture depends on its volume rate of drainage discharge, on the time duration of a single drainage operation, and on the average time between successive operations.

(100) "Fixture unit, supply" or "sfu" means a measure of the probable hydraulic demand on the water supply by various types of plumbing fixtures.

Note: The supply fixture unit value for a particular fixture depends on its volume rate of supply, on the time duration of a single supply operation, and on the average time between successive operations.

(101) "Floodfringe" has the meaning specified under s. NR 116.03 (14).

Note: Section NR 116.03 (14) reads: "Floodfringe" means that portion of a floodplain which is outside of the floodway, which is covered by flood water during the regional flood. The term "floodfringe" is generally associated with standing water rather than flowing water.

(102) "Flood level rim" means the edge of the receptacle from which water overflows.

(103) "Floodplain" has the meaning specified under s. NR 116.03 (16).

Note: Section NR 116.03 (16) reads: "Floodplain" means that land which has been or may be covered by flood water during the regional flood. The floodplain includes the floodway, floodfringe, shallow depth flooding, flood storage and coastal floodplain areas.

(104) "Floodway" has the meaning specified under s. NR 116.03 (22).

Note: Section NR 116.03 (22) reads: "Floodway" means the channel of a river or stream, and those portions of the floodplain adjoining the channel required to carry the regional flood discharge.

(105) "Floor sink" means a receptor for the discharge from indirect or local waste piping installed with its flood level rim even with the surrounding floor.

(106) "Flow" means the volumetric measure of a liquid stream in a specified time.

(107) "Flushometer valve" means a device which discharges a predetermined quantity of water to fixtures for flushing purposes and is closed by direct water pressure.

(108) "Flush valve" means a device located at the bottom of a tank for flushing water closets and similar fixtures.

(109) "Garage, private" means a building or part of a building used for the storage of vehicles or other purposes, by a family or less than 3 persons not of the same family and which is not available for public use.

(110) "Garage, public" means a building or part of a building which accommodates or houses self-propelled land, air or water vehicles for 3 or more persons not of the same family.

(111) "Governmental unit" has the meaning specified under s. 145.01 (5), Stats.

Note: Section 145.01 (5), Stats., reads: "Governmental unit responsible for the regulation of private sewage systems" or "governmental unit", unless otherwise qualified, means the county, except that in a county with a population of 500,000 or more these terms mean the city, village or town where the private sewage system is located.

(112) "Graywater" means wastewater contaminated by waste materials, exclusive of urine, feces or industrial waste, deposited into plumbing drain systems.

(113) "Grease interceptor" means a receptacle designed to intercept and retain or remove grease or fatty substances.

(114) "Groundwater" has the meaning specified under s. 160.01 (4), Stats.

Note: Section 160.01 (4), Stats., reads: "Groundwater" means any of the waters of the state, as defined under s. 281.01 (18), occurring in a saturated subsurface geological formation of rock or soil.

(115) "Hand-held shower" means a type of plumbing fixture that includes a cross connection control device, a hose and a hand-held discharge piece such as a shower head or spray.

(116) "Health care facility" means any building or part of a building used for purposes such as a hospital, nursing home, and offices and clinics with operatories for dentists or doctors.

(117) "Health care plumbing appliance" means a plumbing appliance, the function of which is unique to health care activities.

(118) "High groundwater" means zones of soil saturation which include perched water tables, shallow regional groundwater tables or aquifers, or zones that are seasonally, periodically or permanently saturated.

(119) "High groundwater elevation" means the higher of either the elevation to which the soil is saturated when observed as a free water surface, or the elevation to which the soil has been seasonally or periodically saturated as indicated by the highest elevation of redoximorphic features in the soil profile.

(120) "High hazard" means a situation where the water supply system could be contaminated with a toxic solution.

(121) "Holding tank" means a watertight receptacle for the collection and holding of wastewater.

(122) "Horizontal pipe" means any pipe or fitting which makes an angle of less than 45° with the horizontal.

(123) "Horizontal reference point" means a stationary, identifiable point to which horizontal dimensions can be related.

(124) "Hose connection backflow preventer" means a type of cross connection control device which consists of 2 independent checks, force-loaded or biased to a closed position, with an atmospheric vent located between the 2 check valves, which is forced-loaded or biased to an open position, and a means for attaching a hose.

(125) "Hose connection vacuum breaker" means a type of cross connection control device which consists of a check valve member force-loaded or biased to a closed position and an atmospheric vent valve or means force-loaded or biased to an open position when the device is not under pressure.

(126) "Hot water" means water at a temperature of 110° F. or more.

(127) "Hot water storage tank" means a tank used to store water that is heated indirectly by a circulating water heater or by steam or hot water circulating through coils or by other heat exchange methods internal or external to the tank.

(128) "Human health hazard" has the meaning specified under s. 254.01 (2), Stats.

Note: Section 254.01 (2), Stats., reads: "Human health hazard" means a substance, activity or condition that is known to have the potential to cause acute or chronic illness or death if exposure to the substance, activity or condition is not abated.

(129) "Hydrostatic test" means a test performed on a plumbing system or portion thereof in which the system is filled with a liquid, normally water, and raised to a designated pressure.

(130) "Indian lands" means lands owned by the United States and held for the use or benefit of Indian tribes or bands or individual Indians, and lands within the boundaries of a federally recognized reservation that are owned by Indian tribes or bands or individual Indians.

(131) "Indirect waste piping" means drain piping which does not connect directly with the drain system, but which discharges into the drain system by means of an air break or air gap into a receptor.

(132) "Individual vent" means a pipe installed to vent a fixture trap.

(133) "Industrial wastewater" means the liquid wastes that result from industrial processes.

(134) "Infiltrative surface" means the plane within a POWTS treatment or dispersal component at which effluent is applied to in situ soil or engineered soil.

(135) "In situ soil" means soil naturally formed or deposited in its present location or position and includes soil material that has been plowed using normal tillage implements and depositional material resulting from erosion or flooding.

(136) "Interceptor" or "separator" means a device designed and installed so as to separate and retain deleterious, hazardous or undesirable matter from wastes flowing through it.

(137) "Laboratory faucet backflow preventer" means a type of cross connection control device which consists of 2 independently acting check valves force-loaded or biased to a closed position and, between the check valves, a means for automatically venting to atmosphere which is force-loaded or biased to an open position.

(138) "Laboratory plumbing appliance" means a plumbing appliance, the function of which is unique to scientific experimentation or research activities.

(139) "Leaching chamber" means a product designed to support soil and create a cavity for the temporary storage of effluent and to provide an infiltrative surface for the distribution cell POWTS dispersal or treatment component.

(140) "Leader" means a pipe or channel outside a building which conveys storm water from the roof or gutter drains to a storm drain, storm sewer or to grade.

(141) "Lead-free" mean a chemical composition equal to or less than 0.2% of lead.

(142) "Linear loading rate" means the amount of effluent applied daily along the landscape contour expressed in gallons per day per linear foot along a site contour.

(143) "Load factor" means the percentage of the total connected fixture unit flow rate which is likely to occur at any point in a drain system.

(144) "Local station" means a National Weather Service (NWS) precipitation station or other station accepted by the department as collecting precipitation data in accordance with NWS methods.

(145) "Local waste piping" means a portion of drain piping which receives the wastes discharged from indirect waste piping and which discharges those wastes by means of an air break or air gap into a receptor.

(146) "Local vent" means a pipe connecting to a fixture and extending to outside air through which vapor or foul air is removed from the fixture.

(147) "Low hazard" means a situation where the water supply system could be contaminated with a nontoxic substance.

(148) "Main" means the principal pipe artery to which branches may be connected.

(149) "Manhole" means an opening constructed to permit access by a person to a sewer or any underground portion of a plumbing system.

(150) "Manufactured dwelling" has the meaning specified under s. Comm 20.07 (52).

Note: Section Comm 20.07 (52) reads: "Manufactured dwelling" means any structure or component thereof which is intended for use as a dwelling and:

1. Is of closed construction and fabricated or assembled on site or off site in manufacturing facilities for installation, connection or assembly and installation at the building site; or

2. Is a building of open construction which is made or assembled in manufacturing facilities away from the building site for installation, connection or assembly and installation on the building site and for which certification is sought by the manufacturer.

(151) "Mechanical joint" means a connection between pipes, fittings or pipes and fittings by means of a device, coupling, fitting or adapter where compression is applied around the center line of the pieces being joined, but which is not caulked, threaded, soldered, solvent cemented, brazed or welded.

(152) "Mobile home" means a vehicle as defined under s. 66.058 (1) (d), Stats.

Note: Section 66.058 (1) (d), Stats., reads: "Mobile home" is that which is, or was as originally constructed, designed to be transported by any motor vehicle upon a public highway and designed, equipped and used primarily for sleeping, eating and living quarters, or is intended to be so used; and includes any additions, attachments, annexes, foundations and appurtenances.

(153) "Mobile home drain connector" means the pipe that joins the drain piping for a mobile or manufactured home to the building sewer.

(154) "Mobile home park" has the meaning specified under s. 66.058 (1) (e), Stats.

Note: Section 66.058 (1) (e), Stats., reads: "Mobile home park" means any plot or plots of ground upon which 2 or more units, occupied for dwelling or sleeping purposes are located, regardless of whether or not a charge is made for such accommodation.

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

(156) "Multipurpose piping system" means a type of water distribution system conveying potable water to plumbing fixtures and appliances and automatic fire sprinklers with intention of serving both domestic water needs and fire protection needs within an one- or 2-family dwelling or manufactured dwelling.

(157) "Municipality" means any city, village, town or county in this state.

(158) "Munsell soil color" means a color classification that specifies the relative degrees of the color variables in terms of hue, value and chroma.

(159) "Navigable waters" has the meaning specified under s. NR 115.03(5).

Note: Section NR 115.03 (5) reads: "Navigable waters" means Lake Superior, Lake Michigan, all natural inland lakes within Wisconsin and all streams, ponds, sloughs, flowages and other waters within the territorial limits of this state, including the Wisconsin portion of boundary waters, which are navigable under the laws of this state. Under s. 281.31 (2) (d), Stats., notwithstanding any other provision of law or administrative rule promulgated thereunder, shoreland ordinances required under s. 59.971, Stats., and this chapter do not apply to lands adjacent to farm drainage ditches if:

(a) Such lands are not adjacent to a natural navigable stream or river;

(b) Those parts of such drainage ditches adjacent to such lands were nonnavigable streams before ditching or had no previous stream history; and

(c) Such lands are maintained in nonstructural agricultural use.

(160) "Negative pressure" means a pressure less than atmospheric.

(161) "Nonpotable water" means water not safe for drinking, personal or culinary use.

(162) "Nonpublic" means, in the classification of plumbing fixtures, those fixtures in residences, apartments, living units of hotels and motels, and other places where the fixtures are intended for the use by a family or an individual to the exclusion of all others.

(163) "Nontoxic" means a probable human oral lethal dose of greater than 15 grams of solution per kilogram of body weight.

(164) "Occupancy" means the purpose for which a building, structure, equipment, materials, or premises, or part thereof, is used or intended to be used.

(165) "Oil interceptor" means a device designed to intercept and retain oil, lubricating grease or other similar materials.

(166) "Offset" means a combination of fittings or bends which brings one section of the pipe out of line but into a line parallel with the other section.

(167) "One or 2-family dwelling" means a building containing not more than 2 dwelling units.

(168) "Open air" means outside the building.

(169) "Ordinary high-water mark" has the meaning specified under s. NR 115.03 (6).

Note: Section NR 115.03 (6), reads: "Ordinary high-water mark" means the point on the bank or shore up to which the presence and action of surface water is so continuous as to leave a distinctive mark such as by erosion, destruction or prevention of terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristic. Where the bank or shore at any particular place is of such character that it is difficult or impossible to ascertain where the point of ordinary high-water mark is, recourse may be had to the opposite bank of a stream or to other places on the shore of a lake or flowage to determine whether a given stage of water is above or below the ordinary high-water mark.

(170) "Participating governmental unit" means a governmental unit which applies to the department for financial assistance under s. Comm 87.60, and which meets the conditions specified under s. 145.245 (9), Stats.

(171) "Peak flow" means the largest anticipated recurrent wastewater discharge to a private onsite wastewater treatment system.

(172) "Pipe applied atmospheric type vacuum breaker" means a type of cross connection control device where the flow of water into the device causes a float to close an air inlet port and when the flow of water stops the float falls and forms a check valve against back siphonage and at the same time opens the air inlet port to allow air to enter and satisfy the vacuum.

(173) "Pit privy" means an enclosed nonportable toilet into which nonwater-carried human wastes are deposited to a subsurface storage chamber that is not watertight.

(174) "Pitch" means the gradient or slope of a line of pipe in reference to a horizontal plane.

(175) "Place of employment" has the meaning specified under s. 101.01 (11), Stats.

Note: Section 101.01 (11), Stats., reads: "Place of employment" includes every place, whether indoors or out or underground and the premises appurtenant thereto where either temporarily or permanently any industry, trade or business is carried on, or where any process or operation, directly or indirectly related to any industry, trade or business, is carried on, and where any person is, directly or indirectly, employed by another for direct or indirect gain or profit, but does not include any place where persons are employed in private domestic service which does not involve the use of mechanical power or in farming. "Farming" includes those activities specified in s. 102.04 (3), and also includes the transportation of farm products, supplies or equipment directly to the farm by the operator of said farm or employes for the use thereon, if such activities are directly or indirectly for the purpose of producing commodities for market, or as an accessory to such production. When used with relation to building codes, "place of employment" does not include an adult family home, as defined in s. 50.01 (1), or, except for the purposes of s. 101.11, a previously constructed building used as a community-based residential facility, as defined in s. 50.01 (1g), which serves 20 or fewer unrelated residents.

(176) "Plumbing" has the meaning specified under s. 145.01 (10), Stats.

Note: Section 145.01 (10), Stats., reads: "Plumbing" means and includes:

(a) All piping, fixtures, appliances, equipment, devices and appurtenances in connection with the water supply, water distribution and drainage systems, including hot water storage tanks, water softeners and water heaters connected with such water and drainage systems and also includes the installation thereof.

(b) The construction, connection or installation of any drain or waste piping system from the outside or proposed outside foundation walls of any building to the mains or other sewage system terminal within bounds of, or beneath an area subject to easement for highway purposes, including private sewage systems, and the alteration of any such systems, drains or waste piping.

(c) The water service piping from the outside or proposed outside foundation walls of any building to the main or other water utility service terminal within bounds of, or beneath an area subject to easement for highway purposes and its connections.

(d) The water pressure system other than municipal systems as provided in ch. 281.

(e) A plumbing and drainage system so designed and vent piping so installed as to keep the air within the system in free circulation and movement; to prevent with a margin of safety unequal air pressures of such force as might blow, siphon or affect trap seals, or retard the discharge from plumbing fixtures, or permit sewer air to escape into the building; to prohibit cross-connection, contamination or pollution of the potable water supply and distribution systems, and to provide an adequate supply of water to properly serve, cleanse and operate all fixtures, equipment, appurtenances and appliances served by the plumbing system.

(177) "Plumbing appliance" means any one of a special class of plumbing devices which is intended to perform a special function. The operation or control of the appliance may be dependent upon one or more energized components, such as motors, controls, heating elements, or pressure or temperature sensing elements. The devices may be manually adjusted or controlled by the user or operator, or may operate automatically through one or more of the following actions: a time cycle, a temperature range, a pressure range, or a measured volume or weight.

(178) "Plumbing fixture" means a receptacle or device which:

(a) Is either permanently or temporarily connected to the water distribution system of the premises, and demands a supply of water from the system;

(b) Discharges used water, waste materials, or sewage either directly or indirectly to the drain system of the premises; or

(c) Requires both a water supply connection and a discharge to the drain system of the premises.

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

(180) "Point of standards application" has the meaning specified under s. 160.01 (5), Stats.

Note: Section 160.01 (5) Stats., reads: "Point of standards application" means the specific location, depth or distance from a facility, activity or practice at which the concentration of a substance in groundwater is measured for purposes of determining whether a preventive action limit or an enforcement standard has been attained or exceeded.

(181) "Potable water" means water that is:

(a) Safe for drinking, personal or culinary use; and

(b) Free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming in its bacteriological and chemical quality to the requirements specified in ch. NR 809.

(182) "POWTS" means a private onsite wastewater treatment system.

(183) "POWTS component" means any subsystem, subassembly or other system designed for use in or as part of a private onsite wastewater treatment system which may include treatment, dispersal or holding and related piping.

(184) "POWTS dispersal component" means a device or method that is intended to promote the assimilation of treated wastewater by the environment.

(185) "POWTS holding component" means any receptacle intended to collect wastewater for a period of time, including holding and dosing tanks.

(186) "POWTS treatment component" means a device or method that is intended to reduce the contaminant load of wastewater.

(187) "Prefabricated plumbing" means concealed drain piping, vent piping or water supply or a combination of these types of piping, contained in a modular building component, which will not be visible for inspection when delivered to the final site of installation.

(188) "Pressure relief valve" means a pressure actuated valve held closed by a spring or other means and designed to automatically relieve pressure at a designated pressure.

(189) "Pressure vacuum breaker assembly" means a type of cross connection control device which consists of an independently operating internally loaded check valve and an independently operating loaded air inlet located on the discharge side of the check valve, a tightly closing shut-off valve located at each end of the assembly, and test cocks.

(190) "Pressurized flushing device" means a device that uses the water supply to create a pressurized discharge to flush a fixture exclusive of gravity type flushing systems.

(191) "Preventive action limit" or "PAL" has the meaning as specified under s. 160.01 (6), Stats.

Note: Section 160.01 (6), Stats., reads: "Prevention action limits means a numerical value expressing the concentration of a substance in groundwater which is adopted under s. 160.15, Stats., and specified under s. NR 140.10 or 140.12.

(192) "Principal residence" means a residence that is occupied at least 51% of the year by the owner. Principal residence includes a residence owned by a trust or estate of an individual, if the residence is occupied at least 51% of the year by a person who has an ownership interest in the residence as a beneficiary of the trust or estate.

(193) "Private interceptor main sewer" means a privately owned sewer serving 2 or more buildings and not directly controlled by a public authority.

(194) "Private onsite wastewater treatment system" has the meaning given for 'private sewage system' under s. 145.01 (12), Stats.

Note: Section 145.01 (12), Stats., reads: "Private sewage system" means a sewage treatment and disposal system serving a single structure with a septic tank and soil absorption field located on the same parcel as the structure. This term also means an alternative sewage system approved by the department including a substitute for the septic tank or soil absorption field, a holding tank, a system serving more than one structure or a system located on a different parcel than the structure. A private sewage system may be owned by the property owner or by a special purpose district.

(195) "Private water main" means a privately owned water main serving 2 or more buildings and not directly controlled by a public authority.

(196) "Public" means, in the classification of plumbing fixtures, those fixtures which are available for use by the public or employes.

(197) "Public building" has the meaning specified under s. 101.01 (12), Stats.

Note: Section 101.01 (12), Stats., reads: "Public building" means any structure, including exterior parts of such building, such as a porch, exterior platform or steps providing means of ingress or egress, used in whole or in part as a place of resort, assemblage, lodging, trade, traffic, occupancy, or use by the public or by 3 or more tenants. When used in relation to building codes, "public building" does not include a previously constructed building used as a community-based residential facility as defined in s. 50.01 (1g) which serves 20 or fewer unrelated residents or an adult family home, as defined in s. 50.01 (1).

(198) "Public sewer" means a sewer owned and controlled by a public authority.

(199) "Public water main" means a water supply pipe for public use owned and controlled by a public authority.

(200) "Quick closing valve" means a valve or faucet that closes automatically when released manually or controlled by mechanical means for fast action closing.

(201) "Receptor" means a fixture or device that receives the discharge from indirect or local waste piping.

(202) "Redoximorphic feature" means a feature formed in the soil matrix by the processes of reduction, translocation and oxidation of iron and manganese compounds in seasonally saturated soil.

(203) "Reduced pressure detector backflow preventer" means a type of reduced pressure principle type backflow preventer which includes a parallel flow meter to indicate leakage or unauthorized use of water downstream of the assembly.

(204) "Reduced pressure principle type backflow preventer" means a type of cross connection control device which contains 2 independently acting check valves, separated by an intermediate chamber or zone in which there is a hydraulically operated means for venting to atmosphere, and includes 2 shut-off valves and 4 test cocks.

(205) "Relief vent" means a vent which permits additional circulation of air in or between drain and vent systems.

(206) "Riser" means a water supply pipe that extends vertically one full story or more.

(207) "Roof drain" means a drain installed to receive water collecting on the surface of a roof and to discharge it into a conductor.

(208) "Roughing in" means the installation of all parts of the plumbing system which can be completed prior to the installation of fixtures including drain, water supply and vent piping and the necessary fixture supports.

(209) "Row house" has the meaning specified under s. Comm 51.01 (114a).

Note: Under s. Comm 51.01 (114a) "row house" means a place of abode not more than 3 stories in height, arranged to accommodate 3 or more attached, side by side or back to back living units.

(210) "Safing" means a pan or other collector placed beneath a pipe or fixture to prevent leakage from escaping to the floor, ceiling or walls.

(211) "Sand interceptor" means a receptacle designed to intercept and retain sand, grit, earth and other similar solids.

(212) "Sanitary sewer" means a pipe that carries wastewater consisting in part of domestic wastewater.

(213) "Scum" means the accumulated floating solids generated during the biological, physical or chemical treatment, coagulation or sedimentation of wastewater.

(214) "Secretary" means the secretary of the department of commerce or designee.

(215) "Servicing" has the meaning as specified under s. NR 113.03 (57).

Note: Under s. NR 113.03 (57) "servicing" means removing the scum, liquid, sludge or other wastes from a private sewage system such as septic or holding tanks, dosing chambers, grease interceptors, seepage beds, seepage pits, seepage trenches, privies or portable restrooms and properly disposing or recycling of the contents as provided in this chapter.

(216) "Sewage" means wastewater containing fecal coliform bacteria exceeding 200 CFU, colony forming units, per 100 ml.

(217) "Sewage grinder pump" means a type of sewage pump which macerates wastewater consisting in part of sewage.

(218) "Sewage pump" means an automatic pump for the removal of wastewater from a sanitary sump.

(219) "Slip-joint" means a connection in which one pipe slips into another, the joint of which is made tight with a compression type fitting.

(220) "Sludge" means the accumulated solids generated during the biological, physical or chemical treatment, coagulation or sedimentation of water or wastewater.

(221) "Small commercial establishment" means a commercial establishment or business place with a maximum daily wastewater flow rate of less than 5,000 gallons per day as determined from the design criteria of the state plumbing code. Small commercial establishment includes a farm, including a residence on a farm, if the residence is occupied by a person who is an operator of the farm and if the maximum daily wastewater flow rate of the farm and the residence on the farm is less than 5,000 gallons-per-day as determined from the design criteria of the state plumbing code.

(222) "Soil" means the naturally occurring pedogenically developed and undeveloped regolith overlying bedrock.

(223) "Soil consistence" means the resistance of soil material to deformation or rupture as related to the degree of adhesion and cohesion of a soil mass.

(224) "Soil horizon" means a layer of soil material approximately parallel to the land surface and differing from adjacent genetically related layers in physical, chemical, or biologic characteristics.

(225) "Soil morphology" means the physical or structural characteristics of a soil profile particularly as related to the arrangement of soil horizons based on color, texture, structure, consistence, and porosity.

(226) "Soil profile" means a vertical section of soil containing one or more soil horizons.

(227) "Soil profile evaluation" means a determination of soil properties or characteristics as they relate to wastewater or nonwater-carried human waste treatment or dispersal.

(228) "Soil structure" means the combination or arrangement of individual soil particles into definable aggregates or peds, which are characterized and classified on the basis of size, shape, and degree of distinctness.

(229) "Soil texture" means the relative proportions of sand, silt and clay (soil separates) in a soil.

(230) "Spigot" means the end of a pipe which fits into a bell or hub.

(231) "Spill level" means the horizontal plane to which water will rise to overflow through channels or connections which are not directly connected to any drainage system, when water is flowing into a fixture, vessel or receptacle at the maximum rate of flow.

(232) "Spring line, pipe" means the line or place from which the arch of a pipe or conduit rises.

Note: See ch. Comm 82 Appendix for an illustration depicting the spring line of a pipe.

(233) "Stack" means a drain or vent pipe that extends vertically one full story or more.

(234) "Stack vent" means a vent extending from the top of a drain stack.

(235) "Standpipe" means a drain pipe serving as a receptor for the discharge wastes from indirect or local waste piping.

(236) "State" means the state of Wisconsin, its agencies and institutions.

(237) "State plumbing code" means chs. Comm 81 to 87.

(238) "Sterilizer, boiling type" means a device of nonpressure type, used for boiling instruments, utensils, or other equipment for disinfecting.

(239) "Sterilizer, instrument" means a device for the sterilization of various instruments.

(240) "Sterilizer, pressure" means a pressure vessel fixture designed to use steam under pressure for sterilizing.

Note: A pressure sterilizer is also referred to as an autoclave.

(241) "Sterilizer, pressure instrument washer" means a pressure vessel designed to both wash and sterilize instruments during the operating cycle of the device.

(242) "Sterilizer, utensil" means a device for the sterilization of utensils.

(243) "Sterilizer vent" means a separate pipe or stack, indirectly connected to the drain system at the lower terminal, which receives the vapors from nonpressure sterilizers, or the exhaust vapors from pressure sterilizers, and conducts the vapors directly to the outer air.

(244) "Sterilizer, water" means a device for sterilizing water and storing sterile water.

(245) "Storm sewer" means a pipe that carries storm water, surface water, groundwater and clear water wastes.

(246) "Storm water wastes" means the wastewater collected from a precipitation event.

(247) "Subsoil drain" means that part of a drain system which conveys the ground or seepage water from the footings of walls or below the basement floor under buildings to the storm sewer or other point of disposal.

(248) "Sump" means a tank or pit that receives wastewater that must be emptied by mechanical means.

(249) "Sump pump" means an automatic water pump for storm water or clear water wastes from a sump, pit or low point.

(250) "Sump vent" means a vent pipe from a nonpressurized sump.

(251) "Supports" means hangers, anchors and other devices for supporting and securing pipes or fixtures to structural members of a building.

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

(253) "Swimming pool" means a structure, basin, chamber or tank containing an artificial body of water for swimming, diving or recreational bathing.

(254) "Temperature and pressure relief valve" means a combination relief valve designed to function as both a temperature relief and pressure relief valve.

(255) "Temperature relief valve" means a temperature actuated valve designed to automatically discharge at a designated temperature.

(256) "Tempered water" means water ranging in temperature from 85°F. to less than 110°F.

(257) "Total suspended solids" or "TSS" means solids in wastewater that can be removed readily by standard filtering procedures in a laboratory and reported as milligrams per liter (mg/L).

(258) "Toxic" means a probable human oral lethal dose of 15 or less grams of solution per kilogram of body weight.

(259) "Trap" means a fitting, device or arrangement of piping so designed and constructed as to provide, when properly vented, a liquid seal which prevents emission of sewer gases without materially affecting the flow of wastewater through it.

(260) "Trap seal" means the vertical distance between the top of the trap weir and the top of the dip separating the inlet and outlet of the trap.

(261) "Trap seal primer, water supply fed" means a type of valve designed to supply water to the trap in order to provide and maintain the water seal of the trap.

(262) "Trap weir" means that part of a trap that forms a dam over which wastes must flow to enter the drain piping.

(263) "Turf sprinkler system" means a system of piping, appurtenances and devices installed underground to distribute water for lawn or other similar irrigation purposes.

(264) "Unsaturated soil" means soil in which the pore spaces contain water at less than atmospheric pressure, as well as air and other gases.

(265) "Vacuum" means any pressure less than that exerted by the atmosphere.

(266) "Vacuum relief valve" means a device that admits air into the water distribution system to prevent excessive vacuum in a water storage tank or heater.

(267) "Vent" means a part of the plumbing system used to equalize pressures and ventilate the system.

(268) "Vent header" means a branch vent which connects 2 or more stack vents or vent stacks or both and extends to the outside air.

(269) "Vent stack" means a vertical vent pipe which extends one or more stories.

(270) "Vent system" means a pipe or pipes installed to provide a flow of air to or from a drain system, or to provide a circulation of air within the system to protect trap seals from siphonage and back pressure.

(271) "Vertical pipe" means any pipe or fitting which makes an angle of 45° or less with the vertical.

(272) "Wall hydrant, freeze resistant automatic draining type vacuum breaker" means a type of device which is designed and constructed with anti-siphon and back pressure preventive capabilities and with means for automatic post shut-off draining to prevent freezing.

(273) "Wall mounted water closet" means a water closet attached to a wall in such a way that it does not touch the floor.

(274) "Waste" means the discharge from any fixture, appliance, area or appurtenance.

(275) "Waste sink" means a receptor for the discharge from indirect or local waste piping installed with its flood level rim above the surrounding floor.

(276) "Wastewater" means clear water wastes, storm water wastes, domestic wastewater, industrial wastewater, sewage or any combination of these.

(277) "Wastewater, treated" means the effluent conveyed through one or more POWTS treatment components to a POWTS dispersal component.

(278) "Water closet" means a water-flushed plumbing fixture designed to receive human excrement directly from the user of the fixture.

(279) "Water conditioner" means an appliance, appurtenance or device used for the purpose of ion exchange, demineralizing water or other methods of water treatment.

(280) "Water distribution system" means that portion of a water supply system from the building control valve to the connection of a fixture supply connector, plumbing fixture, plumbing appliance, water-using equipment or other piping systems to be served.

(281) "Water heater" means any heating device with piping connections to the water supply system that is intended to supply hot water for domestic or commercial purposes other than space heating.

(282) "Water service" means that portion of a water supply system from the water main or private water supply to the building control valve.

(283) "Waters of the state" has the meaning specified under s. 281.01 (18), Stats.

Note: Section 281.01 (18), Stats., reads: "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, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private within the state or under its jurisdiction.

(284) "Water supply system" means the piping of a private water main, water service and water distribution system, fixture supply connectors, fittings, valves, and appurtenances through which water is conveyed to points of usage such as plumbing fixtures, plumbing appliances, water using equipment or other piping systems to be served.

(285) "Water treatment device" means a device which:

(a) Renders inactive or removes microbiological, particulate, inorganic, organic or radioactive contaminants from water which passes through the device or the water supply system downstream of the device; or

(b) Injects into the water supply system gaseous, liquid or solid additives other than water, to render inactive microbiological, particulate, inorganic, organic or radioactive contaminants.

(286) "Wetland" has the meaning as specified under s. NR 322.03(11).

Note: Section NR 322.03(11) reads: "Wetland" means an area where water is at, near or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which has soil indicative of wet conditions.

(287) "Wetland, constructed" means a man-made design complex of saturated substrates, emergent and submergent vegetation, and water that simulate natural wetlands for human use and benefits.

(288) "Wet vent" means that portion of a vent pipe which receives the discharge of wastes from other than water closets, urinals or other fixtures which discharge like sewage or fecal matter.

(289) "Yoke vent" means a vent connected to a drain stack for the purpose of preventing pressure changes in the drain stack.

Comm 81.20 INCORPORATION OF STANDARDS BY REFERENCE. (1) CONSENT. Pursuant to s. 227.21, Stats., the attorney general and the revisor of statutes have consented to the incorporation by reference of the standards listed in sub. (3).

(2) COPIES. Copies of the adopted standards are on file in the offices of the department, the secretary of state and the revisor of statutes. Copies of the standards may be purchased through the respective organizations listed in Tables 81.20-1 to 81.20-14.

(3) ADOPTION OF STANDARDS. The standards referenced in Tables 81.20-1 to 81.20-14 are hereby incorporated by reference into this chapter.

Table 81.20-1

AHAM	Association of Home Appliance Manufacturers 20 North Wacker Drive Chicago, Illinois 60606
Standard Reference Number	**Title**
DW-1-92	Household Electric Dishwashers

Table 81.20-2

	ANSI	American National Standards Institute, Inc. 1430 Broadway New York, New York 10018
	Standard Reference Number	**Title**
1.	A112.1.2-91	Air Gaps in Plumbing Systems
2.	A112.6.1M-88	Supports for Off-the-Floor Plumbing Fixtures for Public Use
3	A112.14.1-75(R1990)	Backwater Valves
4.	A112.18.1M-94	Plumbing Fixture Fittings
5.	A112.19.1M-90	Enameled Cast Iron Plumbing Fixtures
6.	A112.19.2M-82	Vitreous China Plumbing Fixtures
7.	A112.19.2M-90	Vitreous China Plumbing Fixtures
8.	A112.19.3M-87	Stainless Steel Plumbing Fixtures (Designed for Residential Use)
9.	A112.19.4-94	Porcelain Enameled Formed Steel Plumbing Fixtures
10.	A112.19.5-79(R1990)	Trim for Water Closet Bowls, Tanks and Urinals (Dimensional Standards)
11.	A112.19.6-90	Hydraulic Requirements for Water Closets and Urinals
12.	A112.21.1M-91	Floor Drains
13.	A112.21.2M-83	Roof Drains
14.	A112.26.1-84	Water Hammer Arrestors
15.	B1.20.1-83(R1992)	Pipe Threads, General Purpose (Inch)
16.	B16.1-89	Cast Iron Pipe Flanges and Flanged Fittings
17.	B16.3-92	Malleable Iron Threaded Fittings
18.	B16.4-92	Gray Iron Threaded Fittings
19.	B16.5-88	Pipe Flanges and Flanged Fittings (w/ 1992 Addenda)
20.	B16.9-93	Factory-Made Wrought Steel Buttwelding Fittings
21.	B16.11-91	Forged Steel Fittings, Socket-Welded and Threaded
22.	B16.12-91	Cast Iron Threaded Drainage Fittings
23.	B16.15-85	Cast Bronze Threaded Fittings, Class 125 and 250
24.	B16.18-84(R1994)	Cast Copper Alloy Solder-Joint Pressure Fittings
25.	B16.22-95	Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings
26.	B16.23-92	Cast Copper Alloy Solder-Joint Drainage Fittings-DWV
27.	B16.24-91	Cast Copper Alloy Pipe Flanges and Flanged Fittings, Class 150 and 300, 400, 600, 900, 1500, and 2500
28.	B16.26-88	Cast Copper Alloy Fittings for Flared Copper Tubes

Table 81.20-2 - (continued)

29.	B16.28-94	Wrought Steel Buttwelding Short Radius Elbows and Returns
30.	B16.29-94	Wrought Copper and Wrought Copper Alloy Solder-Joint Drainage Fittings-DWV
31.	B16.32-92	Cast Copper Alloy Solder-Joint Drainage Fittings for Sovent Drainage Systems
32.	B16.42-87	Ductile Iron Pipe Flanges and Flanged, Fittings, Class 150 and 300
33.	B36.19M-85(R1994)	Stainless Steel Pipe
34.	Z21.22-86	Relief Valves and Automatic Gas Shutoff Devices for Hot Water Supply Systems (w/ 1990 Addendum)
35.	Z124.1-87	Plastic Bathtub Units (w/ 1990 Addendum)
36.	Z124.2-87	Plastic Shower Receptors and Shower Stalls (w/ 1990 Addendum)
37.	Z124.3-86	Plastic Lavatories (w/ 1990 Addendum)
38.	Z124.4-86	Plastic Water Closet Bowls and Tanks (w/ 1990 Addendum)

Table 81.20-3

ARI	**Air-Conditioning and Refrigeration Institute 1815 North Fort Myer Drive Arlington, Virginia 22209**
Standard Reference Number	**Title**
ARI-1010-94	Self-Contained Mechanically-Refrigerated Drinking-Water Coolers

Table 81.20-4

ASSE		**American Society of Sanitary Engineering P.O. Box 9712 Bay Village, Ohio 44140**
	Standard Reference Number	**Title**
1.	1001-90	Pipe Applied Atmospheric Type Vacuum Breakers
2.	1002-86	Water Closet Flush Tank Ball Cocks
3.	1003-93	Water Pressure Reducing Valves
4.	1004-90	Commercial Dishwashing Machines
5.	1005-86	Water Heater Drain Valves
6.	1006-89	Residential Use (Household) Dishwashers
7.	1007-92	Home Laundry Equipment
8.	1008-89	Household Food Waste Disposer Units
9.	1009-90	Commercial Food Waste Grinder Units
10.	1010-82	Water Hammer Arrestors
11.	1011-93	Hose Connection Vacuum Breakers
12.	1012-93	Backflow Preventers with Intermediate Atmospheric Vent

Table 81.20-4 - (continued)

13.	1013-93	Reduced Pressure Principle Backflow Preventers
14.	1014-90	Hand-Held Showers
15.	1015-93	Double Check Backflow Prevention Assembly
16.	1018-86	Trap Seal Primer Valves, Water Supply Fed
17.	1019-93	Vacuum Breaker Wall Hydrants, Freeze Resistant Automatic Draining Type
18.	1020-90	Pressure Vacuum Breaker Assembly
19.	1023-79	Hot Water Dispensers, Household Storage Type, Electrical
20.	1025-78	Diverters for Plumbing Faucets with Hose Spray, Anti-Siphon Type, Residential Applications
21.	1035-93	Laboratory Faucet Backflow Preventers
22.	1037-90	Pressurized Flushing Devices (Flushometers) for Plumbing Fixtures
23.	1047-93	Reduced Pressure Detector Backflow Preventer
24.	1048-93	Double Check Detector Assembly Backflow Preventer
25.	1052-93	Hose Connection Backflow Preventers
26.	1056-93	Back Siphonage Backflow Vacuum Breakers
27.	5010-1013-1-90	Field Test Procedure for a Reduced Pressure Principle Assembly Using A Differential Pressure Gauge
28.	5010-1015-1-90	Field Test Procedure for a Double Check Valve Assembly Using a Duplex Gauge
29.	5010-1015-2-90	Field Test Procedure for a Double Check Valve Assembly Using a Differential Pressure Gauge - High- and Low-Pressure Hose Method
30.	5010-1015-3-90	Field Test Procedure for a Double Check Valve Assembly Using a Differential Pressure Gauge - High-Hose Method
31.	5010-1015-4-90	Field Test Procedure for a Double Check Valve Assembly Using a Sight Tube
32.	5010-1020-1-90	Field Test Procedure for a Pressure Vacuum Breaker Assembly
33.	5010-1047-1-90	Field Test Procedure for a Reduced Pressure Detector Assembly Using A Differential Pressure Gauge
34.	5010-1048-1-90	Field Test Procedure for a Double Check Detector Assembly Using a Duplex Gauge
35.	5010-1048-2-90	Field Test Procedure for a Double Check Detector Assembly Using a Differential Pressure Gauge - High- and Low-Pressure Hose Method
36.	5010-1048-3-90	Field Test Procedure for a Double Check Detector Assembly Using a Differential Pressure Gauge - High-Pressure Hose Method
37.	5010-1048-4-90	Field Test Procedure for a Double Check Detector Assembly Using a Sight Tube

Table 81.20-5

ASTM	American Society for Testing and Materials 100 Barr Harbor Drive West Conshohocken, Pennsylvania 19428-2959
Standard Reference Number	**Title**
1. A53-93a	Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless, Specification for
2. A74-94	Cast Iron Soil Pipe and Fittings, Specification for
3. A123-89a	Zinc (Hot-Galvanized) Coatings on Products Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates and Strip, Specification for
4. A270-90	Seamless and Welded Austenitic Stainless Steel Sanitary Tubing, Specification for
5. A377-94	Ductile-Iron Pressure Pipe, Standard Index of Specifications for
6. A403/A403M-94a	Wrought Austenitic Stainless Steel Piping Fittings, Specification for
7. A450/A450M-94	General Requirements for Carbon, Ferritic Alloy, and Austenitic Alloy Steel Tubes, Specification for
8. B32-95	Solder Metal, Specification for
9. B42-93	Seamless Copper Pipe, Standard Sizes, Specification for
10. B43-94	Seamless Red Brass Pipe, Standard Sizes, Specification for
11. B75-93	Seamless Copper Tube, Specification for
12. B88-93a	Seamless Copper Water Tube, Specification for
13. B152-94	Copper Sheet, Strip, Plate, and Rolled Bar, Specification for
14. B251-93	General Requirements for Wrought Seamless Copper and Copper-Alloy Tube, Specification for
15. B302-92	Threadless Copper Pipe, Specification for
16. B306-92	Copper Drainage Tube (DWV), Specification for
17. C4-62(R1991)	Clay Drain Tile, Specification for
18. C14-94	Concrete Sewer, Storm Drain, and Culvert Pipe, Specification for
19. C33-93	Concrete Aggregates, Specification for
20. C76-94	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe, Specification for
21. C425-91	Compression Joints for Vitrified Clay Pipe and Fittings, Specification for
22. C443-94	Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets, Specification for
23. C564-95	Rubber Gaskets for Cast Iron Soil Pipe and Fittings, Specification for
24. C700-91	Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated, Specification for
25. D1527-94	Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe, Schedules 40 and 80, Specification for

Table 81.20-5 - (continued)

26.	D1785-93	Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80 and 120, Specification for
27.	D2104-93	Polyethylene (PE) Plastic Pipe, Schedule 40, Specification for
28.	D2235-93a	Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings, Specification for
29.	D2239-93	Polyethylene (PE) Plastic Pipe (SIDR-PR) Based on Controlled Inside Diameter, Specification for
30.	D2241-93	Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-PR), Specification for
31.	D2282-94	Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe (SDR-PR), Specification for
32.	D2321-89	Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications, Practice for
33.	D2447-93	Polyethylene (PE) Plastic Pipe, Schedules 40 and 80 Based on Outside Diameter, Specification for
34.	D2464-94	Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, Specification for
35.	D2466-94a	Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, Specification for
36.	D2467-94	Socket-Type Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, Specification for
37.	D2468-93	Acrylonitrile-Butadiene-Styrene (ABS), Plastic Pipe Fittings, Schedule 40, Specification for
38.	D2564-93	Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings, Specification for
39.	D2609-93	Plastic Insert Fittings for Polyethylene (PE) Plastic Pipe, Specification for
40.	D2657-90	Heat-Joining of Polyolefin Pipe and Fittings, Specification for
41.	D2661-94a	Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings, Specification for
42.	D2662-93	Polybutylene (PB) Plastic Pipe (SIDR-PR), Based on Controlled Inside Diameter, Specification for
43.	D2665-94	Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings, Specification for
44.	D2666-93	Polybutylene (PB) Plastic Tubing, Specification for
45.	D2672-94	Joints for IPS Pipe Using Solvent Cement, Specification for
46.	D2680-93	Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Composite Sewer Piping, Specification for
47.	D2683-93	Socket-Type Polyethylene Fittings for Outside Diameter-Controlled Polyethylene Pipe and Tubing, Specification for
48.	D2729-93	Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings, Specification for
49.	D2737-93	Polyethylene (PE) Plastic Tubing, Specification for

Table 81.20-5 - (continued)

50.	D2751-93	Acrylonitrile-Butadiene-Styrene (ABS) Sewer Pipe and Fittings, Specification for
51.	D2774-94	Underground Installation of Thermoplastic Pressure Piping, Practice for
52.	D2846-93	Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems, Specification for
53.	D2852-93	Styrene-Rubber (SR) Plastic Drain Pipe and Fittings, Specification for
54.	D2855-93	Making Solvent-Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings, Practice for
55.	D3000-93	Polybutylene (PB) Plastic Pipe (SDR-PR) Based on Outside Diameter, Specification for
56.	D3034-93	Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings, Specification for
57.	D3035-93	Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Controlled Outside Diameter, Specification for
58.	D3139-89	Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals, Specification for
59.	D3140-90	Flaring Polyolefin Pipe and Tubing, Practice for
60.	D3212-92	Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals, Specification for
61.	D3261-93	Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing, Specification for
62.	D3309-93	Polybutylene (PB) Plastic Hot- and Cold-Water Distribution Systems, Specification for
63.	D3311-92	Drain, Waste, and Vent (DWV) Plastic Fittings Patterns, Specification for
64.	D4068-91	Chlorinated Polyethylene (CPE) Sheeting for Concealed Water-Containment Membrane, Specification for
65.	D4491-89	Water Permeability of Geotextile by Permittivity, Standard Test Method for
66.	D4533-91	Trapezoid Tearing Strength of Geotextiles, Standard Test Method for
67.	D4632-91	Grab Breaking Load and Elongation of Geotextiles, Standard Test Method for
68.	D4751-87	Determining the Apparent Opening Size of a Geotextile, Standard Test Method for
69.	D4833-88	Index Puncture Resistance of Geotextile, Geomembranes, and Related Products, Standard Test Methods for
70.	F402-93	Safe Handling of Solvent Cements, Primers and Cleaners Used for Joining Thermoplastic Pipe and Fittings, Practice for

Table 81.20-5 - (continued)

71.	F405-93	Corrugated Polyethylene (PE) Tubing and Fittings, Specification for
72.	F409-93	Thermoplastic Accessible and Replaceable Plastic Tube and Tubular Fittings, Specification for
73.	F437-93	Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80, Specification for
74.	F438-93	Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40, Specification for
75.	F439-93a	Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80, Specification for
76.	F441-94	Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80, Specification for
77.	F442-94	Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR), Specification for
78.	F477-93	Elastomeric Seals (Gaskets) for Joining Plastic Pipe, Specification for
79.	F493-93a	Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings, Specification for
80.	F628-93	Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe with a Cellular Core, Specification for
81.	F656-93	Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings, Specification for
82.	F810-93	Smoothwall Polyethylene (PE) Pipe for Use in Drainage and Waste Disposal Absorption Fields, Specification for
83.	F845-93	Plastic Insert Fittings for Polybutylene (PB) Tubing, Specification for
84.	F876-93	Crosslinked Polyethylene (PEX) Tubing, Specification for
85.	F877-93	Crosslinked Polyethylene (PEX) Plastic Hot- and Cold-Water Distribution Systems, Specification for
86.	F891-93a	Coextruded Poly (Vinyl Chloride) (PVC) Plastic Pipe with a Cellular Core, Specification for

Table 81.20-6

AWS	**American Welding Society 550 N.W. LeJune Road Miami, Florida 33126**
Standard Reference Number	**Title**
AWS A5.8-92	Filler Metals for Brazing and Braze Welding, Specification for

Table 81.20-7

AWWA	American Water Works Association Data Processing Department 6666 West Quincy Avenue Denver, Colorado 80235
Standard Reference Number	**Title**
1. C110/A21.10-93	American National Standard for Ductile-Iron and Gray-Iron Fittings, 3 in. through 48 in., for Water and Other Liquids
2. C111/A21.11-90	American National Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
3. C115/A21.15-88	American National Standard for Flanged Ductile-Iron and Gray-Iron Pipe with Threaded Flanges
4. C151/A21.51-91	American National Standard for Ductile-Iron Pipe, Centrifugally Cast for Water or Other Liquids
5. C153/A21.53-94	American National Standard for Ductile-Iron Compact Fittings, 3 in. through 16 in., for Water and Other Liquids
6. C700-90	Cold Water Meters - Displacement Type (w/ 1991 Addendum)
7. C701-88	Cold Water Meters - Turbine Type for Customer Service
8. C702-92	Cold Water Meters - Compound Type
9. C704-92	Cold Water Meters - Propeller Type for Main Line Applications
10. C706-91	Cold Water Meters, Direct-Reading Remote Registration Systems for
11. C707-82(R92)	Cold Water Meters, Encoder-Type, Remote-Registration Systems for
12. C708-91	Cold Water Meters - Multi-Jet Type
13. C710-90	Cold Water Meters, Displacement Type - Plastic Main Case (w/ 1991 Addendum)
14. C900-89	American Standard for Polyvinyl Chloride (PVC) Pressure Pipe, 4 in. through 12 in., for Water Distribution (w/ 1992 Addendum)

Table 81.20-8

CISPI	Cast Iron Soil Pipe Institute 5959 Shallowford Road, Suite 419 Chattanooga, Tennessee 37421
Standard Reference Number	**Title**
1. 301-95	Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications, Specification for
2. 310-95	Coupling for Use in Connection with Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications, Specification for

Table 81.20-9

FMRC	Factory Mutual Research Corp. 1151 Boston-Providence Turnpike Norwood, Massachusetts 02062
Standard Reference Number	**Title**
1680	Couplings used in Hubless Cast Iron Systems for Drain, Waste or Vent, Sewer, Rainwater or Storm Drain Systems Above and Below Ground, Industrial/Commercial and Residential, January 1989

Table 81.20-10

MSS	Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. 127 Park Street, N.E. Vienna, Virginia 22180
Standard Reference Number	**Title**
SP-103	Wrought Copper and Copper Alloy Insert Fittings for Polybutylene Systems, 1995 Edition

Table 81.20-11

NSF	NSF International 3475 Plymouth Road P.O. Box 130140 Ann Arbor, Michigan 48113-0140
Standard Reference Number	**Title**
1. Standard 14-90	Plastic Piping Compounds and Related Materials
2. Standard 40-99	Residential Wastewater Treatment Systems
3. Standard 41-98	Non-Liquid Saturated Treatment Systems

Table 81.20-12

STI	Steel Tank Institute 570 Oakwood Road Lake Zurich, Illinois 60047
Standard Reference Number	**Title**
STI-P_3	External Corrosion Protection of Underground Steel Storage Tanks, Specifications and Manual for, 1996 edition

Table 81.20-13

UL	Underwriters Laboratories Inc. 333 Pfingsten Road Northbrook, Illinois 60062
Standard Reference Number	**Title**
1. Standard 58-86	Steel Underground Tanks for Flammable and Combustible Liquids
2. Standard 1746-89	External Corrosion Protection Systems for Steel Underground Storage Tanks

Table 81.20-14

WQA	Water Quality Association 4151 Naperville Road Northbrook, Illinois 60062
Standard Reference Number	**Title**
S-100-85	Household, Commercial and Portable Exchange Water Softeners

SECTION 39. Comm 82.01 Note is amended to read:

Comm 82.01 Note: Chapter Comm 83 contains provisions for the siting, design, installation, inspection and maintenance of private ~~sewage~~ onsite wastewater treatment systems. Chapter Comm 84 contains provisions and standards for plumbing materials, plumbing fixtures and plumbing appliances.

SECTION 40. Comm 82.10 (2) is amended to read:

Comm 82.10 (2) Every building intended for human occupancy shall be provided with an adequate, safe and potable water supply. ~~A building located adjacent to a street in which there is a public water supply, shall be connected to the public water supply~~.

SECTION 41. Comm 82.10 (3) is repealed and recreated to read:

Comm 82.10 (3) To fulfill the basic needs of sanitation and personal hygiene, each dwelling connected to a private onsite wastewater treatment system or public sewer shall be provided with at least the following plumbing fixtures: one water closet, one wash basin, one kitchen sink and one bathtub or shower, except a system or device recognized under ch. Comm 91 may be substituted for the water closet. All other structures for human occupancy shall be equipped with sanitary facilities in sufficient numbers as specified in chs. Comm 50 to 64.

SECTION 42. Comm 82.10 (7) is repealed.

SECTION 43. Comm 82.10 (8) is amended to read:

Comm 82.10 (8) Where plumbing fixtures exist in a building which is not connected to a public sewer system, suitable provision shall be made for ~~disposing of~~ treating and recycling the ~~building~~ sewage and wastewater by a method of holding or ~~sewage~~ treatment ~~disposal~~ and dispersal satisfactory to the department .

SECTION 44. Comm 82.10 (13) is amended to read:

Comm 82.10 (13) Proper protection shall be provided to prevent contamination of food, water, sterile goods and similar materials by backflow of ~~sewage~~ wastewater.

SECTION 45. Comm 82.10 (15) and Note are repealed.

SECTION 46. Comm 82.11 is repealed.

SECTION 47. Comm 82.30 (11) (g) 2 is amended to read:

Comm 82.30 (11) (g) 2. 'Storm and clear water connections'. ~~Storm~~ Except as provided in s. Comm 82.36 (3) (b) 4., storm drain piping and clear water drain piping may not discharge to a sanitary building drain ~~or to a private sewage system~~ which connects to a publicly owned treatment works.

SECTION 48. Comm 82.32 (4) (b) 1 b is amended to read:

Comm 82.32 (4) (b) 1. b. The vertical distance between the top of the fixture drain outlet of a pedestal drinking fountain, a cuspidor or a drain receptor for a sanitary dump station and the horizontal center line of the trap outlet shall not exceed 60 inches.

SECTION 49. Comm 82.34 (5) (a) 2 (title) and (intro.) and 3 and (b) 2 (intro.) are amended to read:

Comm 82.34 (5) (a) 2. 'Private onsite wastewater treatment systems'. All new, altered or remodeled plumbing systems which discharge to private ~~sewage~~ onsite wastewater treatment systems shall be provided with exterior grease interceptors.

3. 'Existing installations'. The department may require the installation of either interior or exterior interceptors for existing plumbing installations where the waterway of a drain system, sewer system or private ~~sewage~~ onsite wastewater treatment system is reduced or filled due to congealed grease.

(b) 2. 'Capacity and sizing'. The minimum liquid capacity of a grease interceptor shall be determined in accordance with the provisions of this subdivision, except no grease interceptor may have a capacity of less than 1000 gallons if the interceptor is to discharge to a private ~~sewage~~ onsite wastewater treatment system or less than 750 gallons if the interceptor is to discharge to a municipal sewer system and treatment facility.

SECTION 50. Comm 82.36 (3) (b) 3 a is renumbered 82.36 (3) (b) 3 and amended to read:

Comm 82.36 (3) (b) 3. The clear water waste from a drinking fountain, water heater relief valve, storage tank relief valve, water softener, iron filter, or floor drain or water testing sink within a municipal well pump house shall be discharged to either a sanitary drain system or a storm drain system.

SECTION 51. Comm 82.36 (3) (b) 3 b is renumbered 82.36 (3) (b) 4 and amended to read:

Comm 82.36 (3) (b) 4. The clear water wastes from equipment other than those listed in subd. 3. ~~a.~~ may be discharged to a sanitary drain system which connects to a publicly owned treatment works, if not more than 20 gallons of clear water wastes per day per building are discharged.

SECTION 52. Comm 82.37 is created to read:

Comm 82.37 SANITATION FACILITIES. (1) COMPOSTING SYSTEMS. (a) Composting systems which employ water or other liquids as a transport medium for wastes shall conform with this subsection.

Note: Composting systems where water or other liquids are not employed as a transport medium are addressed under ch. Comm 91.

(b) The materials, design, construction and performance of a composting system which employs water or other liquids as a transport medium for wastes shall conform to NSF Standard 41.

(c) All composting systems shall be listed by a testing agency acceptable to the department.

Note: Listing agencies acceptable to the department include the American Gas Association; Canadian Standards Association; NSF International; Underwriter's Laboratories; and Warnock Hersey.

(d) 1. Components for the storage or treatment of wastes shall be continuously ventilated.

2. Ventilation ducts or vents for the composting system shall conform to s. Comm 82.31 (16).

(e) 1. The disposal of the end product from a composting system shall be in accordance with 40 CFR Part 503, Standards for the Use or Disposal of Sewage Sludge.

Note: EPA materials relating to EPA 503, including, "Domestic Septage Regulatory Guidance: A Guide to the EPA 503 Rule", are available from the Office of Water Resource, US EPA, 401 M Street SW, Washington D.C. 20460.

2. The disposal of any liquid from a composting system shall be either to a publicly owned treatment works or a POWTS conforming to ch. Comm 83.

(f) The connection of potable water supplies to a composting system shall be protected in accordance with s. Comm 82.41.

(g) The drainage systems for the composting system shall conform to the applicable requirements of ss. Comm 82.30 to 82.36 and the manufacturer's specifications.

(2) SANITARY DUMP STATIONS. (a) Sanitary dump stations which are used to receive domestic wastes and domestic wastewater from the holding tanks of travel trailers, recreational vehicles or other similar mobile vehicles, and transfer containers shall conform with this subsection.

(b) The drain receptor for a sanitary dump station shall be at least 4 inches in diameter.

(c) 1. The drain receptor shall be provided with a self-closing cover.

2. The cover for the drain receptor shall be operable without touching the cover with one's hands.

(d) The drain receptor shall be surrounded by an impervious pad at least 6 feet in diameter. The pad shall be:

1. Pitched toward the drain receptor with a minimum slope of ¼ inch per foot; and

2. Of sufficient strength to sustain anticipated loads.

(e) The drain receptor shall be trapped in accordance with s. Comm 82.32.

(f) The drain receptor for a sanitary dump station that is installed within an enclosed structure shall be vented in accordance with s. Comm 82.31.

(g) A supply of water shall be provided to wash down the drain receptor and pad. The water supply shall be:

1. Provided with cross connection control in accordance with s. Comm 82.41; and

2. Labeled indicating that the supply is not for drinking purposes.

SECTION 53. Comm 82.40 (3) (e) is amended to read:

Comm 82.40 (3) (e) Metering. When a water meter is provided pursuant to s. Comm ~~83.18 (10)~~ 83.54 (2) the water meter shall:

1. Be installed in the water supply system so as to exclude the supply to those water outlets, such as exterior hose bibbs and wall hydrants, which do not discharge to the sanitary drain system; and

2. Include an accessible remote reader device located on the exterior of the building or structure.

Note: Section Comm ~~83.18 (10)~~ 83.54 (2) requires metering when a new building or a new structure is to be served by a holding tank for ~~sanitary~~ domestic wastewater disposal.

SECTION 54. Comm 82.40 (8) (b) 1 to 3 is amended to read:

Comm 82.40 (8) (b) 1. ~~Water~~ Exterior water supply piping may not be located in, under or above sanitary sewer manholes, ~~sewage treatment tanks, holding tanks, dosing tanks, distribution boxes, soil absorption areas or seepage pits for private sewage systems~~ or POWTS treatment, holding or dispersal components.

2. ~~Water~~ Exterior water supply piping shall be located at least 10 feet horizontally away from a ~~sewage treatment tank, holding tank, dosing tank, distribution box, or soil absorption area for a private sewage system~~ POWTS treatment, holding or dispersal component.

~~3. Water supply piping located downslope from a mound type private sewage system shall be at 25 feet horizontally away from the toe of the basal area.~~

SECTION 55. Comm 82.40 (8) (j) is created to read:

Comm 82.40 (8) (j) Water softeners. Ion exchange water softeners used primarily for water hardness reduction that, during regeneration, discharge a brine solution into a private onsite wastewater treatment system shall be of a demand initiated regeneration type equipped with a water meter or a sensor unless the design of the private onsite wastewater treatment system specifically documents the reduction of chlorides.

SECTION 56. Chapter Comm 83 is repealed and recreated to read:

Chapter Comm 83

PRIVATE ONSITE WASTEWATER TREATMENT SYSTEMS

Subchapter I
SCOPE AND APPLICATION

Comm 83.01 PURPOSE. The purpose of this chapter is to establish minimum standards and criteria for the design, installation, inspection and management of a private onsite wastewater treatment system, POWTS, so that the system is safe and will protect public health and the waters of the state.

Comm 83.02 SCOPE. (1) WASTEWATER GENERATION. Except as delineated in sub. (2), this chapter applies to all of the following:

(a) A situation where domestic wastewater is collected and conducted by means of plumbing drain systems and is not conveyed to a wastewater treatment facility regulated by the department of natural resources.

(b) A POWTS where domestic wastewater is treated and dispersed to the subsurface.

(c) A holding tank that is utilized as a POWTS or as part of a POWTS to collect and hold domestic wastewater for transport and treatment elsewhere.

Note 1: Section Comm 82.10 (8) states that where plumbing fixtures exist in a building which is not connected to a public sewer system, suitable provision shall be made for treating and recycling the sewage and wastewater by a method of holding or treatment and dispersal satisfactory to the department.

Note 2: The department of natural resources is responsible for establishing, administering and enforcing standards relative to domestic wastewater treatment systems which either disperse to the surface or to surface waters. The department of natural resources also establishes effluent limitations and monitoring requirements where the design daily influent wastewater flow to a POWTS exceeds 12,000 gallons per day for the purpose of fulfilling WPDES permit requirements under ch. 283, Stats.

Note 3: Pursuant to s. 281.17 (5), Stats., the department of natural resources may also restrict or specify the type of wastewater treatment necessary. Section 281.17 (5) reads:

The department [department of natural resources] may prohibit the installation or use of septic tanks in any area of the state where the department finds that the use of septic tanks would impair water quality. The department shall prescribe alternate methods for waste treatment and disposal in such prohibited areas.

(2) EXEMPTIONS. This chapter does not apply to:

(a) A POWTS owned by the federal government and located on federal lands; and

(b) A POWTS located or to be located on land held in trust by the federal government for Native Americans.

(3) SUBDIVISION STANDARDS. This chapter does not establish minimum lot sizes or lot elevations under s. 145.23, Stats., for the purpose of the department reviewing proposed subdivisions which will not be served by public sewers under s. 236.12, Stats.

Comm 83.03 APPLICATION. (1) INSTALLATIONS. (a) New POWTS installations. The design, installation and management of a new POWTS shall conform with this chapter.

Note: Pursuant to s. 145.135 (2) (b), Stats., the approval of a sanitary permit is based on the rules in effect on the date of the permit approval.

(b) Modifications to existing POWTS. A modification to an existing POWTS, including the replacement, alteration or addition of materials, appurtenances or POWTS components, shall require that the modification conform to this chapter.

Note: The modification of one part of a POWTS may affect the performance or the operation of other parts of the POWTS thereby necessitating further modifications for the 'other parts' to be or remain compliant with the appropriate edition of the state plumbing code; see sub. (2) (b) 1.

(c) Modifications to existing structures served by existing POWTS. When an addition or alteration is proposed to an existing building, structure or facility that is served by an existing POWTS and the proposed addition or alteration will result in a change that affects the wastewater flow or wastewater contaminant load beyond the minimum or maximum capabilities of the existing POWTS, the POWTS shall be modified to conform to the rules of this chapter.

Note: See s. Comm 83.25 (2) relating to the issuance of building permits.

(2) RETROACTIVITY. (a) This chapter does not apply retroactively to an existing POWTS installed prior to [the effective date of this chapter . . . revisor to insert effective date], or for which a sanitary permit has been issued prior to [the effective date of this chapter . . . revisor to insert effective date], except as provided in ss. Comm 83.32 (1) (a) and (c) to (g), 83.54 (4) and 83.55 (1) (b).

(b) 1. Except as provided in subd. 2. and ss. Comm 83.32 (1) (a) and (c) to (g), 83.54 (4) and 83.55 (1) (b), an existing POWTS installed prior to [the effective date of this chapter . . . revisor to insert effective date], shall conform to the siting, design, construction and maintenance rules in effect at the time the sanitary permit was obtained or at the time of installation, if no sanitary permit was issued.

2. a. An existing POWTS installed prior to December 1, 1969 with an infiltrative surface of a treatment and dispersal component that is located 2 feet or more above groundwater or bedrock shall be considered to discharge final effluent that is not sewage, unless proven otherwise.

b. An existing POWTS installed prior to December 1, 1969 with an infiltrative surface of a treatment and dispersal component that is located less than 2 feet above groundwater or bedrock shall be considered to discharge final effluent that is sewage, unless proven otherwise.

(c) An existing POWTS which conforms with this chapter shall be permitted to remain as installed.

(3) PLAT RESTRICTIONS. The department shall consider a restriction or a prohibition placed on a lot or an outlot prior to [the effective date of this chapter . . . revisor to insert effective date], as a result of its plat review authority under s. 236.12, Stats., waived, if a POWTS proposed for the lot complies with this chapter.

(4) GROUNDWATER STANDARDS. (a) Pursuant to s. 160.255, Stats., the design, installation, use or maintenance of a POWTS is not required to comply with the nitrate standard specified in ch. NR 140 Table 1, except as provided under sub. (5).

(b) Pursuant to s. 160.19 (2) (a), Stats., the department has determined that it is not technically or economically feasible to require that a POWTS treat wastewater to comply with the preventive action limit for chloride specified in ch. NR 140 Table 2 as existed on June 1, 1998.

Note: The prevention action limit for chloride as a performance standard relative to the design and management of a POWTS has been determined to be unfeasible because anion exchange is the only chemical process capable of removing chloride from water. The physical processes of removing chloride, such as through evaporation and reverse osmosis, would separate feedwater into two streams, one with a reduced chloride content and the other with an increased chloride content, and result in still having to treat and dispose of chloride contaminated wastewater. The design and management practice to address the enforcement standard for chloride as it relates to a POWTS is addressed under s. Comm 82.40 (8) (j).

(5) ZONING. This chapter does not affect municipal requirements relating to land use, zoning, or other similar requirements, including, pursuant to s. 59.69, Stats., establishing nitrate requirements to encourage the protection of groundwater resources.

Comm 83.04 IMPLEMENTATION. (1) (a) For the purpose of facilitating inspection responsibilities and services, a governmental unit may not issue a sanitary permit for the construction or use of a POWTS that utilizes any of the technologies, designs or methods delineated in Table 83.04-1 and that has been recognized under s. Comm 84.10 (3) or 83.22, unless the governmental unit utilizes one or more individuals, who have obtained approved training under s. Comm 83.05 for the POWTS technology, design or method, to provide the inspections under s. Comm 83.26 (2) to (4), except as provided in par. (b).

(b) A governmental unit may issue a sanitary permit for the construction or use of a POWTS that utilizes any of the technologies, designs or methods delineated in Table 83.04-1 and that has not been recognized under s. Comm 84.10 (3), but has been approved by the department under s. Comm 83.22, provided that governmental unit has arranged with the department to provide the inspections under s. Comm 83.26 (2) to (4).

Table 83.04-1
Restricted Technologies

	Technology
1.	Pressurized distribution component with less than 1/8 inch orifice diameter.[a]
2.	Mechanical POWTS treatment component.[b]
3.	Disinfection unit.[c]
4.	Sand, gravel or peat filter as a POWTS treatment component.[d]

a Includes drip irrigation.
b Includes an aerobic treatment tank or a complete treatment unit within a tank.
c Includes a chlorinator, ozonation unit, and ultraviolet light unit.
d Does not include a mound system.

(2) (a) For the purpose of facilitating planning and administration, a governmental unit may, by ordinance, allot, limit or deny, until January 1, 2003, the issuance of sanitary permits for the construction or use of, within the jurisdiction of the governmental unit, POWTS designs that utilize one or more of the technologies, designs or methods delineated in Table 83.04-2.

(b) 1. The governmental unit option to allot, limit or deny the issuance of sanitary permits under par. (a) shall be limited to permits to serve new development.

2. For the purpose of this subsection, a new development shall be considered a property without an existing habitable building.

Table 83.04-2
LOCAL DELAY OF TECHNOLOGY IMPLEMENTATION

	Technology
1.	Pressurized distribution component with less than 1/8 inch orifice diameter.[a]
2.	Mechanical POWTS treatment component.[b]
3.	Disinfection unit.[c]
4.	Soil treatment or dispersal utilizing less than 24 inches of in situ soil for sites being initially developed.[d]
5.	Sand, gravel or peat filter as a POWTS treatment component.[e]

a Includes drip irrigation.
b Includes an aerobic treatment tank or a complete treatment unit within a tank.
c Includes a chlorinator, ozonation unit, and ultraviolet light unit.
d Includes a type of mound system commonly referred to as "A + 4" where additional sandfill is provided to provide 3 feet of soil treatment.
e Does not include a mound system.

(3) (a) For the purpose of facilitating planning and administration, a governmental unit may, by ordinance, allot, limit or deny the issuance of sanitary permits within the jurisdiction of the governmental unit for the construction or use of POWTS designs that utilize a method or technology that is added to the list under s. Comm 83.61 after July 1, 2001 for not more than 18 months after that type of method or technology has been recognized under that section.

(b) 1. The governmental unit option to allot, limit or deny the issuance of sanitary permits under par. (a) shall be limited to permits intended to serve new development.

2. For the purpose of this subsection, a new development shall be considered a property without an existing habitable building.

Note: The provisions of this section relating to a governmental unit's ability to limit the issuance of sanitary permits for new development does not dictate a specific strategy as to the scope of the limitation. Therefore, limitation options include, but are not limited to, a prohibition for all new development or in certain geographical areas, a quota system for new development, a requirement for a permit to operate for a specific POWTS method or technology, or a service/performance bond for a specific POWTS method or technology.

Comm 83.05 INSTALLATION AND INSPECTION TRAINING. (1) PROGRAM SPECIFICATIONS. (a) Only courses, programs and seminars approved in writing by the department in accordance with this section shall be used to fulfill the required training for the POWTS technologies and methods under ss. Comm 83.04 (1) (a) and 83.21 (2) (c) 4.

(b) 1. The request for a course, program or seminar to be recognized for approval shall be submitted in writing to the department.

2. The request for a course, program or seminar to be recognized for approval shall be received by the department at least 30 calendar days prior to the first day the course, program or seminar is to be conducted.

3. The request for approval shall include sufficient information to determine if the course, program or seminar complies with this subsection.

4. The department shall review and make a determination on a request for approval within 21 calendar days of receipt of the request and information necessary to complete the review.

(c) Courses, programs and seminars to be considered for approval toward installation and inspection training credit shall relate to the installation, operation and maintenance of the technology or method.

(d) 1. The department may impose specific conditions in approving a course, program or seminar for installation and inspection training credit, including limiting credit to specific license, certification or registration categories.

2. The approval of a course, program or seminar for installation and inspection training credit shall expire 5 years after the date of approval.

3. The department may revoke the approval of a course, program or seminar for installation and inspection credit for any false statements, misrepresentation of facts or violation of the conditions on which the approval was based. The department may not revoke the approval of a course, program or seminar less than 30 calendar days prior to the course, program or seminar being held.

(e) 1. The individual or organization that had obtained the course, program or seminar approval shall maintain an attendance record of those individuals who have attended and completed the course, program or seminar.

2. The attendance record shall include all of the following:

a. The course name.

b. The course identification number assigned by the department.

c. The date or dates the course was held or completed.

d. The name of each person attending the course for training and inspection credit.

3. A copy of the attendance record shall be forwarded by the person or organization that had obtained the course, program or seminar approval to the department within 14 calendar days after completion of the course, program or seminar.

(2) EVIDENCE OF COMPLIANCE. An individual who has completed the installation and inspection training shall be responsible for retaining evidence of achieving the training in order to fulfill the obligations under ss. Comm 83.04 (1) (a) and 83.21 (2) (c) 4.

Subchapter II
ADMINISTRATION AND ENFORCEMENT

Comm 83.20 PURPOSE. (1) This subchapter establishes the following:

(a) Regulatory processes and procedures which are to be followed when designing, installing or maintaining a POWTS; and

(b) Responsibilities and actions of the various governmental agencies involved with the administration and enforcement of this chapter.

Note: Section 145.20 (1) (a), Stats., states that the governing body of the governmental unit responsible for the regulation of private sewage systems may assign the duties of administering the private sewage system program to any office, department, committee, board, commission, position or employee of that governmental unit.

(2) Nothing in this chapter shall limit the authority and power of a governmental unit in exercising administration and enforcement responsibilities regarding a POWTS, including requiring and issuing other types of permits for activities not covered under this subchapter relating to sanitary permits.

Comm 83.21 SANITARY PERMITS. (1) GENERAL. (a) Pursuant to ss. 145.135 and 145.19, Stats., the installation or construction of a POWTS may not commence or continue unless all of the following have been fulfilled:

1. The owner of the property on which the POWTS is to be installed possesses a valid sanitary permit.

2. Plan approval for the POWTS has been obtained in accordance with s. Comm 83.22.

(b) The modification of an existing POWTS may not commence or continue unless the owner of the property on which the POWTS is located possesses a valid sanitary permit and has obtained plan approval for the modification under s. Comm 83.22, if the modification involves the addition or replacement of any of the following:

1. A POWTS holding component.

2. A POWTS treatment component.

3. A POWTS dispersal component.

(2) APPLICATION. (a) The application for a sanitary permit shall be made in a format prescribed by the department.

Note: An application for a sanitary permit may be obtained from the governmental unit administering and enforcing this chapter or the department. See appendix for further information relative to the application format and addresses of governmental units and the department.

(b) 1. Except as provided in subd. 2., the application for a sanitary permit shall be submitted to the appropriate governmental unit where the POWTS is located or will be located.

2. The application for a sanitary permit shall be submitted to the department for a POWTS that is located or will be located on property owned by the state.

Note: Section 145.20 (2) (b), Stats., states that the governmental unit responsible for regulation of private sewage systems shall approve or disapprove applications for sanitary permits and assist applicants in preparing an approvable application.

(c) The application for a sanitary permit to the governmental unit shall be accompanied by all of the following:

1. At least one set of clear and legible plans and specifications delineating the information under s. Comm 83.22 (2) (a) 3. and (c).

2. A set of plans bearing the department's conditional approval and the approval letter issued by the department, if required to be reviewed by the department under s. Comm 83.22 (1).

3. Sufficient supporting information to determine whether the proposed design, installation and management of the POWTS or the proposed modification to an existing POWTS conforms with this chapter.

4. Documentation that the master plumber or the master plumber-restricted who is to be responsible for the installation or modification of the POWTS has completed approved training on the proposed POWTS technology or method, if the application for the sanitary permit involves one or more of the technologies or methods specified in s. Comm 83.04 (1).

5. Documentation that maintenance requirements for the proposed POWTS technology or method have been recorded with the deed for the property, if the management plan for the installation or modification under s. Comm 83.54 (1) involves one or more of the following:

a. Evaluating or monitoring any part of the system at an interval of 12 months or less.

b. Servicing or maintaining any part of the system at an interval of 12 months or less.

6. Any other information as specified by local ordinance relating to POWTS installations.

7. A fee as specified by the governmental unit.

Note: Section 145.19 (2) to (6) reads: (2) Fee. No fee for a sanitary permit may be less than $61, or the amount determined under department rule. The governing body for the governmental unit responsible for the regulation of private sewage systems may establish a fee for a sanitary permit which is more than $61, or the amount determined under department rule. [Pursuant to s. Comm 2.67 (1), the minimum sanitary permit fee is $116.]

(3) Copy of permit forwarded to the department. The governmental unit responsible for the regulation of private sewage systems shall forward a copy of each valid sanitary permit and $20, or the amount determined under department rule, of the fee to the department within 90 days after the permit is issued. [Pursuant to s. Comm 2.67 (2), $50 of the sanitary permit fee is to be forwarded to the department.]

(4) Use of fee. The portion of this fee retained by the governmental unit responsible for the regulation of private sewage systems shall be used for the administration of private sewage system programs.

(5) Fee adjustment. The department, by rule promulgated under ch. 227, may adjust the minimum permit fee under sub. (2) and the fee portion forwarded under sub. (3).

(6) Groundwater fee. In addition to the fee under sub. (2), the governmental unit responsible for the regulation of private sewage systems shall collect a groundwater fee of $25 for each sanitary permit. The governmental unit shall forward this fee to the department together with the copy of the sanitary permit and the fee under sub. (3). The moneys collected under this subsection shall be credited to the environmental fund for environmental management.

(3) PROCESSING. (a) A sanitary permit may not be issued until the plans and specifications have been approved by the department or governmental unit having jurisdiction.

(b) A governmental unit may not issue a sanitary permit for the installation or modification of the POWTS that involves one or more of the technologies or methods specified in s. Comm 83.04 (1) unless the master plumber or the master plumber-restricted who is to be responsible for the installation has completed approved training on the proposed POWTS technology or method in accordance with s. Comm s. Comm 83.05.

(c) A governmental unit shall review and make a determination on the submission of an application for a sanitary permit within 30 days after receiving all the required information and fees under sub. (2) (e).

(d) 1. If upon review of the application and the supporting information, the governmental unit or the department determines that the proposed design, installation and management of the POWTS or the proposed modification of an existing POWTS conforms with this chapter, a sanitary permit shall be issued.

2. a. If upon review of the application and the supporting information, the governmental unit or the department determines that the proposed design, installation and management of the POWTS or the proposed modification of an existing POWTS does not conform with this chapter, a sanitary permit may not be issued.

b. When the issuance of a sanitary permit is denied, the governmental unit or department reviewing the application shall provide in writing to the applicant the reasons for denial, a notice for the right to appeal and the procedures for appeal.

c. An applicant denied a sanitary permit by a governmental unit may appeal the decision in accordance with ch. 68, Stats.

d. The appeal of the denial by the department for a sanitary permit shall be made in writing within 30 days from the date of the decision.

(d) A sanitary permit shall be issued by the appropriate governmental unit or the department in a format prescribed by the department.

Note: See appendix for further information relative to the permit format.

(4) TRANSFERS. A sanitary permit may be transferred from an owner to a subsequent owner, pursuant to s. 145.135 (1), Stats.

Note: Section 145.135 (1), Stats., reads in part: "A sanitary permit may be transferred from the holder to a subsequent owner of the land, except that the subsequent owner must obtain a new copy of the sanitary permit from the issuing agent."

(5) EXPIRATION. Pursuant to s. 145.135 (1), Stats., a sanitary permit shall expire 2 years from the date of issuance unless renewed in accordance with sub. (6).

(6) RENEWALS. (a) 1. The application for renewal of a sanitary permit shall be made in a format prescribed by the department.

Note: See appendix for further information relative to the application for renewal format.

2. The application for renewal of a sanitary permit shall be submitted to the department or the appropriate governmental unit in accordance with sub. (2) (b).

(b) The renewal of a sanitary permit shall be contingent upon the proposed POWTS or the proposed modification of an existing POWTS conforming with the rules of this chapter in effect at the time the sanitary permit is renewed.

(7) REVOCATION. (a) The department may revoke a sanitary permit issued under this section for any false statements or misrepresentation of facts on which the sanitary permit was issued.

(b) A governmental unit may revoke a sanitary permit that the governmental unit has issued under this section for any false statements or misrepresentation of facts on which the sanitary permit was issued.

(c) The revocation of a sanitary permit and the reasons for revocation shall be conveyed in writing to the individual to whom the sanitary permit was issued or transferred.

(d) If a sanitary permit is revoked, the installation or modification of a POWTS may not commence or continue until another sanitary permit is obtained.

(8) POSTING. When a sanitary permit is obtained under sub. (2), the sanitary permit shall:

(a) Be posted in such a location and manner on the proposed site where the POWTS is to be installed or modified so that the information on the permit is visible for inspection; and

(b) Remain posted until:

1. The POWTS installation or modification is completed; and

2. An opportunity for a final inspection occurs in accordance with s. Comm 83.26.

Comm 83.22 PLAN REVIEW AND APPROVAL. (1) SUBMISSION OF PLANS. (a) Plans shall be submitted to the department, a designated agent or the governmental unit in accordance with this section for all of the following types of installations or modifications:

1. The installation or construction of a POWTS.

2. The replacement or addition of a POWTS treatment component.

3. The replacement or addition of a POWTS holding component.

4. The replacement or addition of a POWTS dispersal component.

(b) Plans for the types of POWTS delineated in Table 83.22-1 shall be submitted to the department for review.

(c) Plans for the types of POWTS delineated in Table 83.22-2 shall be submitted for review to the department or a designated agent.

Note: See s. Comm 83.23 for more information relative to designated agents.

(d) Plans for the types of POWTS delineated in Table 83.22-3 shall be submitted for review to the appropriate governmental unit where the POWTS is located or will be located.

Table 83.22-1
PLAN SUBMISSIONS
TO DEPARTMENT

Type of Installation
1. POWTS owned by the state.
2. Facilities owned by the state and served by POWTS.
3. POWTS that will not completely utilize treatment and dispersal technologies or methods either approved under s. Comm 84.10 (2) or (3) or recognized under s. Comm 83.61.
4. POWTS treating domestic wastewater combined with industrial wastes[a].
5. Experiments under s. Comm 83.27.

Note a: See s. Comm 83.32 (3) (a).

Table 83.22-2
PLAN SUBMISSIONS
TO DEPARTMENT OR DESIGNATED AGENT

Type of Installation
1. POWTS that will completely utilize treatment and dispersal technologies or methods either approved under s. Comm 84.10 (2) or (3) or recognized under s. Comm 83.61.
2. POWTS that collect and hold all wastewater of the facilities served and utilize holding components either recognized under s. Comm 84.10 (2) or (3) or recognized under s. Comm 83.61.

Note: Pursuant to s. 145.19 (2), Stats., governmental units may require separate plan examination fees or include these fees in the cost of the sanitary permit.

Table 83.22-3
PLAN SUBMISSIONS
TO GOVERNMENTAL UNIT

Type of Installation
1. POWTS that will serve a single one- or 2-family dwelling utilizing technologies or methods either recognized under s. Comm 84.10 (2) or (3) or recognized under s. Comm 83.61, and using gravity distribution of the effluent to an in-ground distribution cell.

Note: Pursuant to s. 145.19 (2), Stats., governmental units may require separate plan examination fees or include these fees in the cost of the sanitary permit.

(2) PLANS AND SPECIFICATIONS. (a) 1. When plans are submitted to the department or designated agent 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. Plans and specifications submitted for review shall be clear, legible and permanent copies.

3. 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. Comm 83.43 and 83.44 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 83.43-1.

(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. Comm 82 to 84 including, but not limited to all of the following:

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

Note: See appendix for an example of the plan review application form.

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. Comm 85.40 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) (e).

Note: Section NR 113.07 (1) (e) reads as follows: Large commercial, industrial, recreational or residential development holding tank systems that singly or when added to together or increased by successive additions generate 3000 gallons of septage per day or greater shall contract with a wastewater treatment facility for treatment of the septage. The contract terms shall provide assurance that the septage from the system will continually be conveyed to, and accepted, at the wastewater treatment facility. If a service area designation exists, the wastewater treatment facility shall amend the service area to include the commercial, industrial, recreational or residential development. The department may not indicate sufficient disposal capacity to the department of industry, labor and human relations, or department of commerce, until the service area adjustments have been completed and approved.

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. Comm 83.27 (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 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 be not be approved until documentation has been submitted to the department indicating that the department of natural resources has issued a WPDES permit for the project under ch. 283, Stats.

b. Solely for the purpose of determining the applicability of subpar. 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 subpar. a., the design wastewater flow of 12,000 gpd for commercial facilities shall be calculated using the estimated wastewater flows specified in s. A-83.43 (6) of the appendix.

d. Solely for the purpose of determining the applicability of subpar. 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. Comm 83.43 (3) (a) and s. A-83.43 (6) of the appendix to calculate the design flow for the commercial facilities.

e. For purpose of determining the applicability of subpar. 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 subpar. a., the combined design wastewater flow shall include that of any existing POWTS which falls within the parameters of subpar. e.

g. Under subpar. 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 of regulation and licensing 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. Comm 2.61 and 2.65.

(3) PLAN REVIEW PROCESS. (a) Time limits. The department shall review and make a determination on the submission of a plan within 15 business days after receiving all the required information and fees.

Note: See appendix for further information regarding the locations of the department's offices where plans may be submitted for review.

(b) Conditional approval. 1. If, upon review, the applicable reviewing agency determines that the plans conform to this chapter and chs. Comm 82 and 84, a conditional approval shall be granted in writing.

2. All conditions indicating nonconformance to this chapter and chs. Comm 82 and 84 shall be corrected before or during installation.

(c) Denial of approval. If, upon review, the applicable reviewing agency determines that the plans do not conform to this chapter or chs. Comm 82 and 84, the request for conditional approval shall be denied in writing.

(4) REVISIONS. (a) A modification to the design of a POWTS for which a plan has been previously granted approval under sub. (3) (b) shall be submitted to the applicable reviewing agency for review in accordance with this section, if the proposed modification involves any one of the following:

1. The replacement or addition of a POWTS treatment component.

2. The replacement or addition of a POWTS holding component.

3. The replacement or addition of a POWTS dispersal component.

4. A change to one or more dispersal components involving any of the following:

a. Location outside suitable evaluated areas or proposed depths.

b. Size.

c. Orientation.

d. Type.

(b) The installer of a POWTS may not implement or undertake the proposed revisions under par. (a) until written approval is obtained from the applicable reviewing agency.

(c) Revisions to previously approved plans shall be reviewed in accordance with sub. (3).

(d) If revisions under par. (a) are submitted to and approved by the department, the owner of the site for the POWTS shall file the revisions with the county which issued the sanitary permit.

(5) LIMITATION OF RESPONSIBILITY. A conditional approval of a plan by the department may not be construed as an assumption by the department of any responsibility for the design of the POWTS or any component of the system. The department does not hold itself liable for any defects in construction, or for any damages that may result from a specific installation.

(6) REVOCATION OF APPROVAL. (a) The department may revoke any plan approval issued under this section for any false statements or misrepresentation of facts on which the approval was based.

(b) The designated agent or governmental unit may revoke any plan approval issued by the designated agent or governmental units for any false statements or misrepresentation of facts on which the approval was based.

(c) The revocation of a plan approval and the reasons for revocation shall be conveyed in writing to the submitter of the plans as noted on the application.

(d) If a plan approval is revoked, the installation or alteration of a POWTS may not continue until another plan approval is obtained.

(7) EVIDENCE OF APPROVAL. (a) When plans are required to be approved by the department or designated agent under sub. (1), the plumber responsible for the installation of a POWTS or the modification of an existing POWTS shall keep at the construction site at least one set of plans bearing evidence of approval by the department or designated agent and at least one copy of specifications.

(b) The plans and specifications shall be maintained at the construction site until the POWTS installation or modification is completed and an opportunity for a final inspection occurs in accordance with s. Comm 83.26.

(c) The plans and specifications shall be made available to the department or the governmental unit upon request.

Comm 83.23 REVIEW AGENT STATUS. (1) Upon request from a governmental unit, the department may delegate to the governmental unit the responsibility to review plans for one or more of the types of POWTS delineated in Table 83.22-2 which are to be or are located within the jurisdiction of that governmental unit.

(2) A request by a governmental unit to review plans for the types of POWTS delineated in Table 83.22-2 shall be made in writing. The request shall include all of the following:

(a) The types of POWTS for which delegation is desired.

(b) Information delineating how the plans are to be processed and reviewed.

(c) Information on how plan review decisions are to be recorded and maintained.

(3) The delegation of plan review by the department shall be contingent upon a governmental unit's request demonstrating sufficient capabilities to complete the reviews, including all of the following:

(a) The employment of one or more individuals who are certified by the department as a POWTS inspector to perform the plan review.

(b) The involvement of one or more individuals, who are certified soil testers, to provide assistance in the plan review process.

Note: The requirements of this subsection do not require the employment of 2 individuals to perform plan review. A single individual who holds a certification as a certified POWTS inspector and as a certified soil tester may fulfill the requirements under pars. (a) and (b).

(4) (a) The department shall provide the governmental unit with a written decision of delegation or denial of delegation relative to a request under this section concerning plan review.

(b) The delegation for plan review shall be contingent upon the governmental unit acknowledging that the submission and review of plans under s. Comm 83.22 (1) may, at the discretion of the submitter, be made to the department or the designated agent.

(5) The department shall include as part of governmental unit audits conducted under s. 145.20 (3) (b), Stats., an evaluation of the plan review functions which are delegated to a governmental unit under this section.

(6) A governmental unit that wishes to discontinue the delegated plan review function under this section shall notify the department in writing at least 30 days prior to the discontinuance.

(7) The recognition as a review agent may be revoked by the department in accordance with s. 145.20 (3) (a) 2., Stats.

Comm 83.24 PETITIONS FOR VARIANCE. (1) The department shall consider and may grant a variance to a provision of this chapter in accordance with ch. Comm 3.

Note: The petition for variance process is to allow the owner of a proposed or existing POWTS to ask the department's recognition of an alternative method or means for complying with the intent of a specific rule.

(2) (a) Pursuant to s. 145.24, Stats., the department may not approve a petition for variance for an existing POWTS which is determined to be a failing private onsite wastewater treatment system.

(b) For the purposes of this subsection, the department shall consider a petition for variance if the existing POWTS is not considered a failing private onsite wastewater treatment system.

Comm 83.25 GOVERNMENTAL PROGRAMS. (1) DELEGATION OF RESPONSIBILITIES. (a) Pursuant to s. 145.20 (1) (am), Stats., the delegation by a governmental unit of the administration and enforcement of this chapter to a town sanitary district or public inland lake protection and rehabilitation district shall be by ordinance.

(b) A copy of an ordinance delegating administration and enforcement of this chapter to a town sanitary district or public inland lake protection and rehabilitation district shall be forwarded to the department at least 30 days prior to the effective date of the ordinance.

(2) ISSUANCE OF BUILDING PERMITS. (a) General. Pursuant to s. 66.036, Stats., the issuance of building permits by a municipality for unsewered properties shall be in accordance with this subsection.

Note: See appendix for a reprint of s. 66.036, Stats.

(b) New construction. A municipality may not issue a building permit to commence construction or installation of a structure that necessitates the use of a POWTS to serve the structure, unless:

1. The owner of the property possesses a sanitary permit for the installation of a POWTS in accordance with s. Comm 83.21; or

Note: Section Comm 83.21 outlines the procedures for the issuance of sanitary permits. Sections 145.135 and 145.19, Stats., mandate that no private sewage system may be installed unless the owner of the property holds a valid sanitary permit.

2. A POWTS of adequate capability and capacity to accommodate the wastewater flow and contaminant load already exists to serve the structure.

Note: See ss. Comm 83.02 and 83.03 concerning the application of current code requirements to existing POWTS.

(c) Construction affecting wastewater flow or contaminant load. 1. A municipality may not issue a building permit to commence construction of any addition or alteration to an existing structure when the proposed construction will modify the design wastewater flow or contaminant load, or both, to an existing POWTS, unless the owner of the property:

a. Possesses a sanitary permit to either modify the existing POWTS or construct a POWTS to accommodate the modification in wastewater flow or contaminant load, or both; or

b. Provides documentation to verify that the existing POWTS is sufficient to accommodate the modification in wastewater flow or contaminant load, or both.

2. For the purpose of this paragraph, a modification in wastewater flow or contaminant load shall be considered to occur:

a. For commercial facilities, public buildings, and places of employment, when there is a proposed change in occupancy of the structure; or the proposed modification affects either the type or number of plumbing appliances, fixtures or devices discharging to the system; and

b. For dwellings, when there is an increase or decrease in the number of bedrooms.

(d) Documentation of existing capabilities. Documentation to verify whether an existing POWTS can accommodate a modification in wastewater flow or contaminant load, or both, shall include at least one of the following:

1. A copy of the plan for the existing POWTS that delineates minimum and maximum performance capabilities and which has been previously approved by the department or the governmental unit.

2. Information on the performance capabilities for the existing POWTS that has been recognized through a product approval under ch. Comm 84.

3. A written investigative report prepared by an architect, engineer, designer of plumbing systems, designer of private sewage systems, master plumber, master plumber-restricted service or certified POWTS inspector analyzing the proposed modification and the performance capabilities of the existing POWTS.

(e) Setbacks. 1. A municipality may not issue a building permit for construction of any structure or addition to a structure on a site where there exists a POWTS, unless the proposed construction conforms to the applicable setback limitations under s. Comm 83.43 (8) (i).

2. The applicant for a building permit shall provide documentation to the municipality issuing the building permit showing the location and setback distances for the proposed construction relative to all of the following:

a. Existing POWTS treatment components.

b. Existing POWTS holding components.

c. Existing POWTS dispersal components.

Note: A municipality which issues building permits may delegate to the governmental unit responsible for issuing sanitary permits the determination of whether the proposed construction will affect or interfere with an existing POWTS relating to capability or location of the existing POWTS.

Comm 83.26 INSPECTIONS AND TESTING. (1) (a) Pursuant to s. 145.02 (3) (c), Stats., the department or governmental unit may inspect the construction, installation, operation or maintenance of a POWTS to ascertain whether the POWTS conforms to plans approved by the department or governmental unit, the conditions of approval and this chapter.

(b) The department may issue an order directing an immediate cessation of the installation of a POWTS or the modification to an existing POWTS for failure to comply with a corrective order.

(c) Pursuant to ss. 145.02 (3) (f) and 145.20 (1) (a) and (2) (f), Stats., an individual authorized by the department or a governmental unit to administer and enforce this chapter may issue orders to abate human health hazards relating to this chapter.

Note: Section Comm 5.66 delineates qualifications and responsibilities for POWTS inspectors.

(d) Pursuant to s. 145.20 (2) (e) and (g), Stats., nothing in this chapter shall limit a governmental unit's authority and power to inspect or require an evaluation of a POWTS, including an existing POWTS at times or for activities not covered under this section.

(2) (a) When a sanitary permit is required under s. Comm 83.21 (1), no part of a POWTS component may be covered nor any POWTS component put into service until the governmental unit or the department has had an opportunity to inspect the system in accordance with this subsection.

Note: Pursuant to s. 145.20 (2), Stats., an individual authorized by a governmental unit to administer and enforce the provisions of chs. Comm 82 to 87 relative to POWTS is required to be a certified POWTS inspector under s. Comm 5.66.

(b) The master plumber or the master plumber-restricted service responsible for the installation of a POWTS or the modification to an existing POWTS shall notify the governmental unit when the work will be or is ready for inspection. The notification shall be in person, in writing or by telephone or other electronic communication in a format acceptable to the governmental unit performing the inspection.

(c) The master plumber or the master plumber-restricted service responsible for the installation of a POWTS or the modification shall maintain records of the inspection notifications. The records shall include the date and time of notification and the name of the person contacted.

(d) The master plumber or master plumber-restricted service responsible for the POWTS installation or modification shall provide the necessary equipment and properly licensed personnel required for the inspection as requested by the governmental unit or department.

(e) If an inspection is not made by the end of the next workday, excluding Saturdays, Sundays, and holidays, after the requested inspection day, the master plumber or the master plumber-restricted service may proceed with the installation of the POWTS, including backfilling and covering.

(3) Pursuant to s. 145.20 (2) (g), Stats., a governmental unit by ordinance may require other inspections in addition to that specified under this section.

(4) A governmental unit shall maintain a written record of each inspection conducted for a POWTS. The record shall include information relative to all of the following:

(a) The location of the POWTS.

(b) The date of the inspection.

(c) The nature and findings of the inspection.

(5) Before being put into service, components of a POWTS shall be tested in accordance with the manufacturer's specifications or as specified as a condition of approval under ss. Comm 83.22 and 84.10.

Comm 83.27 EXPERIMENTS. (1) The provisions of this chapter or ch. Comm 84 are not intended to prevent the design and use of an innovative method or concept for the treatment or dispersal of domestic wastewater which is not specifically addressed by this chapter, provided the experiment has been first approved by the department in accordance with s. Comm 84.50 (3).

(2) The department shall review a submittal of an experiment under this section with input from the technical advisory committee assembled under s. Comm 84.10 (3) (d).

(3) The protocol for a proposed experiment submitted to the department for consideration shall include all of the following.

(a) The experiment shall be supervised by a professional who has experience in small-scale wastewater treatment.

(b) The professional shall submit a vita of training and experience relative to small-scale wastewater treatment along with the application for the experiment.

(c) A proposal shall be submitted for the experiment that includes at least all of the following:

1. The purpose of the experiment.

2. The theory and science behind the proposed experiment including a description of the systems or processes to be used as part of the experiment.

3. The number of systems or components to be installed or modified as part of the experiment.

4. The identification of the initial sites, if known, that will take part in the experiment.

5. A letter of comment from the governmental unit or units where the experiment is to be conducted.

6. The data to be collected and the method to be employed to collect the data.

7. The duration of the proposed experiment.

(d) The experiment may not involve less than 5, and not more than 50 individual installations.

(e) An experiment shall be designed to provide definitive results within 5 years from the start of the experiment.

(f) An experiment on a site not previously developed shall include a contingency plan that provides for a code complying replacement POWTS, if the experiment fails to meet the required performance standards of this chapter.

(g) If the experiment is approved, the experimenter shall execute a signed agreement with the department setting forth the obligations of the parties.

(h) Within 6 months of the completion of the experiment, the results or conclusions shall be forwarded to the department.

Comm 83.28 PENALTIES. Penalties for violations of this chapter shall be assessed in accordance with s. 145.12, Stats.

Note: Section 145.12 (4), Stats., indicates that any person who violates any order under s. 145.02 (3) (f) or 145.20 (2) (f) or any rule or standard adopted under s. 145.13 shall forfeit not less than $10 nor more than $1,000 for each violation. Each violation of an order under s. 145.02 (3) (f) or 145.20 (2) (f) or any rule or standard adopted under s. 145.13 constitutes a separate offense and each day of continued violation is a separate offense.

Comm 83.29 RANGE OF RESPONSES. (1) (a) Pursuant to s. 160.21, Stats., the department may respond with any one or more of the actions delineated under Table 83.29 if the preventive action limits or enforcement standards enumerated in ch. NR 140 Tables 1 and 2 are exceeded at a point of standards application as a result of the performance of a POWTS, including a POWTS existing prior to [the effective date of this chapter . . . revisor to insert effective date], except as provided in par. (b).

(b) Pursuant to s. 160.255, Stats., the design, installation, use or maintenance of a POWTS is not required to comply with the nitrate standard specified in ch. NR 140 Table 1, except as provided under s. Comm 83.03 (5).

Table 83.29
DEPARTMENT RANGE OF RESPONSES

- Gather more data relative to the cause and significance of the exceedence.
- Determine whether the situation is a human health hazard.
- Issue orders to change or comply with the management or maintenance plan of a specific POWTS or type of onsite wastewater system.
- Issue orders to conform with this chapter, including the prohibition of an activity or practice.
- Determine whether the exceedence is an isolated problem, or is likely to recur.
- Revise or revoke a product approval issued under ch. Comm 84 for a treatment or dispersal component.
- Revise the rules of this chapter or chs. Comm 81, 82, 84 or 85.

(2) Pursuant to s. 160.21 (2), Stats., the point of standards application relative to the performance of POWTS shall be:

(a) Any point of present groundwater use for potable water supply; and

(b) Any point beyond the boundary of the property on which the facility, practice or activity is located.

Subchapter III
GENERAL REQUIREMENTS

Comm 83.30 PURPOSE. This subchapter establishes parameters for the types of POWTS that may be used and how a POWTS may be used.

Comm 83.31 PRINCIPLES. A POWTS shall be operated and used in such a manner so as not to render the POWTS inoperative or beyond its capabilities, and thereby, create a human health hazard.

Comm 83.32 PROHIBITIONS AND LIMITATIONS. (1) PROHIBITIONS. (a) Except as provided in s. Comm 83.03 (4), the introduction of wastewater or substances in such quantities or concentrations to a POWTS, including a POWTS existing prior to [the effective date of this chapter . . . revisor to insert effective date], that results in exceeding the enforcement standards and preventive action limits specified in ch. NR 140 Tables 1 and 2 at a point of standards application shall be prohibited.

Note: Comm 83.03 (4) reads: (4) GROUNDWATER STANDARDS. (a) Pursuant to s. 160.255, Stats., the design, installation, use or maintenance of a POWTS is not required to comply with the nitrate standard specified in ch. NR 140 Table 1, except as provided under sub. (5).

(b) Pursuant to s. 160.19 (2) (a), Stats., the department has determined that it is not technically or economically feasible to require that a POWTS treat wastewater to comply with the preventive action limit for chloride specified in ch. NR 140, Table 2, as existed on June 1, 1998.

(c) Substances deleterious to a POWTS shall be intercepted, diluted or treated in accordance with s. Comm 82.34 prior to the substance discharging into a POWTS.

(d) The use of a cesspool as a POWTS is prohibited, including any cesspool existing prior to [the effective date of this chapter . . . revisor to insert effective date].

(e) The discharge of domestic wastewater or effluent to the surface waters of the state is prohibited, including by means of plumbing outfall pipes existing prior to [the effective date of this chapter . . . revisor to insert effective date].

(f) The discharge of domestic wastewater or effluent to the ground surface is prohibited, including by means of plumbing outfall pipes existing prior to [the effective date of this chapter . . . revisor to insert effective date].

(g) The infiltrative surface of a treatment or dispersal component of a POWTS existing prior to December 1, 1969, which consists in part of soil may not be located in bedrock or groundwater.

(h) The use of camping unit transfer containers as a POWTS holding component shall be restricted to campgrounds permitted by the department of health and family services under ch. HFS 178.

(2) LOCAL PROHIBITIONS. (a) A municipality may by ordinance prohibit or limit the installation and use of the following technologies, designs or methods as POWTS components:

1. A holding tank.

2. A constructed wetland as a POWTS treatment component.

3. An evapotranspiration bed as a POWTS treatment component.

(b) A municipality may enact ordinances that are more restrictive than the applicable state minimum standards for those POWTS existing prior to December 1, 1972, except as provided in s. Comm 83.03 (2) (b) 2.

Note: The date, December 1, 1972, reflects the point in time at which the state plumbing code became a state-wide uniformly applied code rather than just a minimum standard. Since December 1, 1969 to [the effective date of this chapter . . .revisor to insert effective date], the state plumbing code required 36 inches of soil between the infiltrative surface of a POWTS and high groundwater or bedrock.

(c) A municipality may by ordinance restrict the ownership of a POWTS to a governmental entity or agency when the POWTS is to serve 2 or more structures or buildings that are located on more than one property.

(3) LIMITATIONS. (a) Industrial wastes and wastewater may not, unless approved by the department of natural resources, be introduced into a plumbing drain system that is served by a POWTS.

Note: The department of natural resources regulates industrial wastes under ch. NR 214. Section NR 214.02 reads in part: "This chapter applies to those discharges of industrial wastes to land treatment systems not regulated under ch. NR 518. This includes but is not limited to liquid wastes, by-product solids and sludges generated by: fruit and vegetable processing, dairy products processing, meat, fish and poultry products processing, mink raising operations, aquaculture, commercial laundromat and motor vehicle cleaning operations and any other industrial, commercial or agricultural operation which results in a point source discharge that has no detrimental effects on the soils, vegetation or groundwater of a land treatment system".

(b) Storm and clear water wastes may be introduced into a plumbing drain system that is served by a POWTS, if the POWTS is designed to accept those wastes. A POWTS may accept wastes permitted under s. Comm 82.36 (3) (b).

Note: Section Comm 82.36 (3) (b) 4. permits the discharge of a maximum of 20 gallons per day of clear water wastes to a sanitary drain system connected to a publicly owned treatment works.

(c) Except as provided in ch. NR 116, no part of a POWTS may be installed in a floodway.

Note: See s. Comm 83.45 (6) for installations in a floodfringe.

Comm 83.33 ABANDONMENT. A subsurface tank or pit that is no longer used as a POWTS component shall be abandoned by complying with all of the following:

(1) Disconnecting all piping to the tanks and pits.

(2) Sealing all disconnected piping to the tanks and pits in accordance with s. Comm 82.21 (2) (h).

(3) Pumping and disposing of the contents from all tanks and pits.

Note: The disposal of the contents from treatment tanks, distribution tanks, seepage pits and holding components is addressed in ch. NR 113 which is administered by the department of natural resources.

(4) Removing all tanks or removing the covers of the tanks or pits and filling the tanks and pits with soil, gravel or an inert solid material.

Note: Pursuant to s. 281.45, Stats., municipalities and sanitary districts may determine the availability of, and require connection to, public sewers. Section 281.45, Stats., reads in part: "HOUSE CONNECTIONS. To assure preservation of public health, comfort and safety, any city village or town or town sanitary district having a system of waterworks or sewerage, or both, may by ordinance require buildings used for human habitation and located adjacent to a sewer or water main, or in a block through which one or both of these systems extend, to be connected with either or both in the manner prescribed. If any person fails to comply for more than 10 days after notice in writing the municipality may impose a penalty or may cause connection to be made, and the expense thereof shall be assessed as a special tax against the property."

Subchapter IV
DESIGN AND INSTALLATION

Comm 83.40 PURPOSE. This subchapter establishes minimum parameters for the design and installation of a POWTS for the purpose of:

(1) Safeguarding public health;

(2) Minimizing the level of substances which have a reasonable probability of entering waters of the state; and

(3) Delineating measures, conditions and performance standards by which to evaluate designs.

Comm 83.41 PRINCIPLES. (1) A POWTS shall be designed to hold wastewater or reduce the contaminant load and disperse the flow of wastewater as specified in this subchapter.

(2) A POWTS shall be designed to have sufficient capacity to accommodate the anticipated quantities of wastewater that will be discharged into the system.

(3) A POWTS intended to treat and disperse wastewater shall be designed to have sufficient ability to treat or separate out the anticipated types, quantities and concentrations of wastewater contaminants to be discharged into the system so that the dispersed wastewater will not create a human health hazard.

(4) A POWTS shall be designed to disperse wastewater below the surface of the ground at a rate that promotes long term assimilation into the soil and limits the possibility of surfacing.

Comm 83.42 APPLICATION. (1) DESIGN BASIS. The design of a POWTS shall be based on the methods and limitations outlined in this subchapter or on other documented data acceptable to the department.

(2) DESIGN RELATION TO ACTUAL FLOWS AND CONTAMINANT LOADS. For any situation where it is known that the wastewater flow or contaminant load exceeds the parameters of this subchapter, the POWTS shall be designed in relation to the known flow or load.

(3) DESIGN CONSIDERATIONS. The evidence to support assertions relative to contaminant reduction and hydraulic dispersal shall include at least all of the following:

(a) The flow and contaminant load of the influent wastewater.

(b) The ability of all treatment and dispersal components to reduce contaminant load and disperse hydraulic flow into the environment.

(c) The flow velocities and friction losses throughout the system based upon accepted engineering practice.

Comm 83.43 GENERAL REQUIREMENTS. (1) MATERIALS. The components of a POWTS shall be constructed of materials and products that are of a type recognized under this chapter or ch. Comm 84.

(2) DESIGN FLOW. In order to accommodate peak wastewater flow, the design wastewater flow of a POWTS shall equal at least 150% of the estimated daily flow generated from the source or sources.

(3) ESTIMATED DAILY COMBINED FLOW FOR A POWTS SERVING A DWELLING. The estimated daily wastewater flow of combined graywater, clear water and blackwater from a dwelling shall be based on one or more of the following:

(a) The following equation:

100 gallons x B = F

Where: B = number of bedrooms, based on 2 persons per bedroom, unless otherwise approved by the department.

F = Estimated daily wastewater flow per dwelling per day (in gallons), excluding storm water discharges.

(b) A detailed estimate of wastewater flow based upon per capita occupancy or usage of the dwelling or per function occurrence within the dwelling.

(4) ESTIMATED DAILY SEGREGATED GRAYWATER FLOW FOR A POWTS SERVING A DWELLING. The estimated daily wastewater flow of graywater and clear water from a dwelling shall be based on one or more of the following:

(a) The following equation:

60 gallons x B = F

Where: B = number of bedrooms, based on 2 persons per bedroom, unless otherwise approved by the department.

F = Estimated daily graywater flow per dwelling per day (in gallons), excluding storm water discharges.

(b) A detailed estimate of graywater flow based upon per capita occupancy or usage of the dwelling or per function occurrence within the dwelling.

(5) ESTIMATING SEGREGATED BLACKWATER FLOW FOR A POWTS SERVING A DWELLING. The estimated daily wastewater flow of blackwater from a dwelling shall be based on one or more of the following:

(a) The following equation:

40 gallons x B = F

Where: B = number of bedrooms, based on 2 persons per bedroom, unless otherwise approved by the department.

F = Estimated daily blackwater flow per dwelling per day (in gallons).

(b) A detailed estimate of blackwater flow based upon per capita occupancy or usage of the dwelling or per function occurrence within the dwelling.

(6) ESTIMATING WASTEWATER FLOW FOR COMMERCIAL FACILITIES. The estimated daily wastewater flow of graywater, blackwater, or combined graywater-blackwater flow from commercial facilities shall be based on one or more of the following:

(a) Measured daily wastewater flow over a period of time representative of the facility's use or occupancy.

(b) A detailed estimate of wastewater flow based upon per capita occupancy or usage of the facility or per function occurrence within the facility.

Note: See appendix for further information.

(7) ESTIMATING CONTAMINANT LOADS. Estimates of contaminant loads from dwellings and public facilities shall be based on a detailed analysis including all contaminants listed in s. Comm 83.44 (2) (a).

Note 1: See appendix for further information.

Note 2: See Note under s. Comm 83.32 (2) for information relative to industrial wastes.

(8) GENERAL DESIGN REQUIREMENTS. (a) Flow velocity. 1. Piping within a POWTS shall be designed and installed to supply wastewater to POWTS treatment and dispersal components while maintaining the velocity required to ensure operation of the POWTS.

2. Gravity flow piping between POWTS components shall be installed at a pitch that produces a computed flow velocity of at least one foot per second when flowing half full.

3. Pressurization equipment or devices and piping to be utilized upstream of a POWTS treatment or dispersal component consisting in part of in situ soil shall be designed and installed to produce a computed velocity of at least 2 feet per second.

4. Gravity piping within a POWTS treatment or dispersal component consisting in part of in situ soil shall be installed level or pitched downstream a maximum 4 inches per 100 feet.

(b) Distribution and drain pipe sizing. The piping within a POWTS shall be of a diameter to permit the operation of the POWTS.

(c) Frost protection. All POWTS components shall be protected from freezing temperatures that could detrimentally affect component operation to provide wastewater conveyance, treatment or dispersal.

(d) Component placement. The orientation of a POWTS treatment or dispersal component consisting in part of in situ soil shall take into account landscape variations in elevation, slope orientation, and other conditions that could affect component performance relative to dispersal or aeration.

(e) Alarms or warning systems. 1. a. A POWTS component utilizing a mechanical device to treat wastewater or to distribute effluent shall be provided with an automatic visual or audible means of notifying the user of the POWTS of the failure of the mechanical device.

Note: In accordance with s. Comm 16.28, an alarm that is electrically powered is to be on a separate circuit from the circuit supplying power to the mechanical device.

b. An alarm indicating the failure of a pump shall remain audible or visible until manually turned off.

c. Where duplex pumping equipment is employed to provide continuous component operation in the event that one pump fails, the pumps shall be installed in such a manner so as to provide the continuous operation automatically.

2. A POWTS holding tank shall be provided with an automatic visual or audible means of notifying the user of the POWTS of the necessity for servicing.

(f) Accessibility. The design of a POWTS shall include provisions to provide access to all components that require maintenance or observation.

(g) Anchoring system components. An exterior subsurface POWTS treatment tank or POWTS holding component to be installed in an area subject to saturated conditions shall be installed so as to prevent flotation of the tank or component.

Note: See appendix for further information.

(h) Treatment byproducts. 1. All treatment byproducts discharged from or as a result of operating a POWTS shall be disposed of so as not to create a human health hazard.

Note: The disposal of the contents of holding tanks and the sludge, scum, and contaminated liquids from treatment tanks and components is regulated by the department of natural resources under chs. NR 113 and NR 204.

2. Deleterious or hazardous materials segregated out from effluent flows shall be disposed of in a manner conforming with the rules of the state agency having jurisdiction.

3. Effluent from a POWTS shall be dispersed so as not to create a human health hazard.

4. All POWTS components within a building or structure shall be gas tight unless provisions are made assuring the safety of individuals entering the building or structure.

(i) Site parameters and limitations. POWTS treatment, holding and dispersal components shall be located so as to provide the minimum horizontal setback distances as outlined in Table 83.43-1 as safety factors for public health, waters of the state and structures in the event of component failure.

Note: Chapter NR 812 establishes upslope location criteria for wells relative to contamination sources.

Table 83.43-1
HORIZONTAL SETBACK PARAMETERS

Physical Feature	POWTS Treatment Component Consisting in Part of In Situ Soil or Dispersal Component	Exterior Subsurface Treatment Tank or Holding Tank Component	Servicing, Suction Lines and Pump Discharge Lines
Building	10 feet	5 feet[a]	5 feet[a]
Property Line	5 feet	2 feet	2 feet
Swimming Pool	15 feet	none[b]	none[b]
OHWM of Navigable Waters	50 feet	10 feet	10 feet
Water Service and Private Water Main	10 feet	10 feet	10 feet
Well	chs. NR 811 & 812[c]	chs. NR 811 & 812[c]	chs. NR 811 & 812[c]

OHWM = Ordinary High-Water Mark
Note a: Except camping unit transfer containers
Note b: See s. Comm 84.43 (8) (f) relative to accessibility.
Note c: Portions of chs. NR 811 & 812 are reprinted in the appendix.

Note: The Department of Transportation under s. Trans 233.08 establishes setback limits from the centerline of state trunk highways or connecting highways to structures and improvements which include septic systems.

(j) Service suction and discharge lines. 1. A suction line or discharge line serving a holding tank for servicing purposes shall comply with all of the following:

a. A pipe serving as the suction or discharge line shall be of an acceptable type in accordance with ch. Comm 84.

b. A suction or discharge line shall terminate with a service port consisting of a quick disconnect fitting with a removable plug.

c. The service port of a suction or discharge line shall terminate at least 2 feet above final grade.

d. The service port of a suction or discharge line shall be identified as such with a permanent sign with lettering at least ½ inch in height.

e. The service port of a suction or discharge line shall be secured to a permanent support that is capable of withstanding the loads and forces placed on the port.

f. A suction or discharge line shall be at least 3 inches in diameter.

2. A suction line serving a holding tank may not be installed in such a manner or arrangement that the tank can be drained by gravity or siphonic action.

3. Where a lift station is employed for servicing a holding tank, the pump discharge line shall conform with subd. 1, except as provided in subpars. a. and b.

a. A discharge line from the lift station shall be at least 2 inches in diameter.

b. The lift station pump shall be activated by means of a keyed-switch at the service port.

Comm 83.44 PARAMETERS FOR POWTS COMPONENTS CONSISTING OF IN SITU SOIL. (1) EVALUATION. POWTS treatment and dispersal components consisting in part of in situ soil shall be evaluated in accordance with ch. Comm 85.

(2) INFLUENT QUALITY. (a) The quality of influent discharged into a POWTS treatment or dispersal component consisting in part of in situ soil shall be equal to or less than all of the following:

1. A monthly average of 30 mg/L fats, oil and grease.

2. A monthly average of 220 mg/L BOD_5.

3. A monthly average of 150 mg/L TSS.

(b) The monthly average under par. (a) shall be calculated as the sum of all measurements taken over 30 consecutive days, with at least 6 measurements occurring on 6 separate days, and divided by the number of measurements taken during that period.

(c) Influent discharged to a POWTS treatment or dispersal component that consists in part of unsaturated soil may not contain any solid or suspended solid exceeding 1/8 inch in diameter.

(3) INFILTRATIVE SURFACE. (a) The infiltrative surface of unsaturated soil to which influent is discharged shall be located at least 24 inches above the estimated highest groundwater elevation and bedrock.

(b) 1. At least 6 inches of the 24-inch soil separation required under par. (a) shall be an in situ soil type for which soil treatment capability has been credited under Table 83.44-3.

2. The purpose of the 6 inches of in situ soil under subd. 1. shall be to assure that the influent will be assimilated into subsurface soils without ponding on the ground surface.

(c) The infiltrative surface of unsaturated soil to which influent is discharged shall be located at least one inch below the finished grade.

(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 83.44-1 or Table 83.44-2 based upon the influent quality concentrations being applied.

b. Under subpar. 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 $\leq$ 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 83.44-1 shall only be recognized where the percolation results have been filed with the governmental unit before July 2, 1994.

2. Maximum soil application rates other than those specified in Tables 83.44-1 or 83.44-2 may be employed for the design of a POWTS treatment or dispersal component consisting in part of in situ soil if documentation is submitted and approved under s. Comm 83.22 and is based on soil permeability and evapotranspiration estimates correlated to specific soil characteristics described in a detailed morphological soil evaluation.

(b) The treatment capability of a POWTS treatment component consisting of unsaturated soil shall be limited to that specified in Table 83.44-3, unless otherwise approved by the department.

(c) The design of a treatment or dispersal component consisting in part of situ soil shall reflect restrictive soil horizons that affect treatment or dispersal.

(5) EFFLUENT DISTRIBUTION. (a) The distribution of effluent to a treatment or dispersal component consisting of silt loam or finer soil material with weak platy or massive structure shall be accomplished by means of pressurized distribution.

(b) 1. The distribution of effluent to in situ soil shall be accomplished by means of pressurized distribution, if the value for BOD_5, TSS and fecal coliform of the effluent is equal to or less than all of the following:

a. A monthly average of 30mg/L BOD_5.

b. A monthly average of 30mg/L TSS.

c. A monthly geometric mean of 10^4 fecal coliform cfu per 100 ml.

Note: "CFU" mean colony forming units.

2. The geometric mean under subd. 1. c. shall be determined on the basis of measurements taken over 30 consecutive days, with at least 6 measurements occurring on 6 separate days.

(c) 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 83.44-1
MAXIMUM SOIL APPLICATION RATES
BASED UPON PERCOLATION RATES

Percolation Rate (minutes per inch)	Maximum Monthly Average $BOD_5 > 30$ mg/L ≤ 220 mg/L TSS > 30 mg/L ≤ 150 mg/L (gals/sq ft/day)	Maximum Monthly Average $BOD_5 \leq 30$ 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
$\leq$ means less than or equal to

Table 83.44-2
MAXIMUM SOIL APPLICATION RATES
BASED UPON MORPHOLOGICAL SOIL EVALUATIONS

Soil Texture	Soil Structure	Maximum Monthly Average $BOD_5 > 30 \leq 220$mg/L TSS > 30 ≤ 150mg/L (gals/sq ft/day)	Maximum Monthly Average $BOD_5 \leq 30$ mg/L TSS ≤ 30 mg/L (gals/sq ft/day)
Coarse sand or coarser	N/A	0.7	1.6
Loamy coarse sand	N/A	0.7	1.4
Sand	N/A	0.7	1.2
Loamy sand	Weak to strong	0.7	1.2
Loamy sand	Massive	0.5	0.7
Fine sand	Moderate or strong	0.5	0.9
Fine sand	Massive or weak	0.4	0.6
Loamy fine sand	Moderate or strong	0.5	0.9
Loamy fine sand	Massive or weak	0.4	0.6
Very fine sand	N/A	0.4	0.6
Loamy very fine sand	N/A	0.4	0.6
Sandy loam	Moderate or strong	0.5	0.9
Sandy loam	Weak, weak platy	0.4	0.6
Sandy loam	Massive	0.3	0.5

Table 83.44-2 continued

Soil Texture	Soil Structure	Maximum Monthly Average	
		$BOD_5 > 30 \leq 220$mg/L TSS $> 30 \leq 150$mg/L (gals/sq ft/day)	$BOD_5 \leq 30$ mg/L TSS ≤ 30 mg/L (gals/sq ft/day)
Loam	Moderate or strong	0.5	0.8
Loam	Weak, weak platy	0.4	0.6
Loam	Massive	0.3	0.5
Silt loam	Moderate or strong	0.5	0.8
Silt loam	Weak, weak platy	0.2	0.3
Silt loam	Massive	0.0	0.2
Sandy clay loam	Moderate or strong	0.4	0.6
Sandy clay loam	Weak, weak platy	0.2	0.3
Sandy clay loam	Massive	0.0	0.0
Clay loam	Moderate or strong	0.4	0.6
Clay loam	Weak, weak platy	0.2	0.3
Clay loam	Massive	0.0	0.0
Silty clay loam	Moderate or strong	0.4	0.6
Silty clay loam	Weak, weak platy	0.2	0.3
Silty clay loam	Massive	0.0	0.0
Sandy clay	Moderate or strong	0.2	0.3
Sandy clay	Massive or weak	0.0	0.0
Clay	Moderate or strong	0.2	0.3
Clay	Massive or weak	0.0	0.0
Silty clay	Moderate or strong	0.2	0.3
Silty clay	Massive or weak	0.0	0.0

Note: > means greater than
≤ means less than or equal to
N/A means Not Applicable

Table 83.44-3
MINIMUM DEPTH OF UNSATURATED SOIL FOR TREATMENT PURPOSES[a]
(in inches)

Soil Texture	Soil Structure	Influent Quality	
		Fecal Coliform[b] $>10^4$ cfu/100ml	Fecal Coliform[b] $\leq 10^4$ cfu/100ml
Very coarse sand or coarser	N/A[c]	120	60
Coarse sand	N/A[c]	60	36
Loamy coarse sand (w/ ≤35% coarse fragments)	N/A[c]	60	36
Loamy coarse sand (w/ >35% to ≤60% coarse fragments)	N/A[c]	120	60
Loamy coarse sand (w/ >60% coarse fragments)	N/A[c]	NC	NC
Sand (w/ ≤35% coarse fragments)	N/A[c]	36	24
Sand (w/ >35% to ≤60% coarse fragments)	N/A[c]	120	60
Sand (w/ >60% coarse fragments)	N/A[c]	NC	NC
Loamy sand	N/A[c]	36	24
Fine sand	Moderate or strong	36	24
Fine sand	Massive or Weak	36	24
Loamy fine sand	Moderate or strong	36	24
Loamy fine sand	Massive or Weak	36	24
Very fine sand	N/A[c]	36	24
Loamy very fine sand	N/A[c]	36	24
Sandy loam	Moderate or strong	36	24
Sandy loam	Weak, weak platy	36	24
Sandy loam	Massive	36	24
Loam	Moderate or strong	36	24
Loam	Weak, weak platy	36	24
Loam	Massive	36	24
Silt loam	Moderate or strong	36	24
Silt loam	Weak, weak platy	36	24
Silt loam	Massive	36	24
Sandy clay loam	Moderate or strong	36	24
Sandy clay loam	Weak, weak platy	36	24
Sandy clay loam	Massive	36	24
Clay loam	Moderate or strong	36	24
Clay loam	Weak, weak platy	36	24
Clay loam	Massive	36	24
Silty clay loam	Moderate or strong	36	24
Silty clay loam	Weak, weak platy	36	24
Silty clay loam	Massive	36	24

Table 83.44-3 continued

Soil Texture	Soil Structure	Influent Quality Fecal Coliform[b] >10^4 cfu/100ml	Influent Quality Fecal Coliform[b] ≤10^4 cfu/100ml
Sandy clay	Moderate or strong	36	24
Sandy clay	Massive or weak	36	24
Clay	Moderate or strong	36	24
Clay	Massive or weak	36	24
Silty clay	Moderate or strong	36	24
Silty clay	Massive or weak	36	24

Note a: Influent quality as per s. Comm 83.44 (2)
Note b: Fecal coliform is determined as a monthly geometric mean in accordance with s. Comm 83.45 (5) (b) 2.
Note c: Structure will not affect performance
N/A means Not Applicable
NC means No Credit
≤ means less than or equal to
> means great than

(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 the surface contour of the component site location unless otherwise approved by the department.

Note: See appendix for an illustration depicting a distribution cell.

(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.

(7) GEOMETRY. The geometry of a subsurface treatment or dispersal component consisting in part of the in situ soil shall take into account linear loading rates that are based on soil texture, structure, consistence and distance to seasonal soil saturation and restrictive soil horizons.

Comm 83.45 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. Comm 83.22.

(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 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. Comm 84.10 or a plan approval under s. Comm 83.22.

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

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

Note: See s. Comm 83.43 (8) (g) relative to anchoring provisions.

Subchapter V
MANAGEMENT

Comm 83.50 PURPOSE. The purpose of this subchapter is to:

(1) Establish monitoring and maintenance requirements for POWTS in order to ensure that POWTS will operate as designed and thereby protect the public health and the waters of the state; and

(2) Provide the department with data by which to make regulatory decisions.

Comm 83.51 PRINCIPLES. (1) A POWTS, including a POWTS existing prior to [the effective date of this chapter . . . revisor to insert effective date], shall be maintained at all times so as not to create a human health hazard.

(2) When upon inspection of a POWTS, including a POWTS existing prior to [the effective date of this chapter . . . revisor to insert effective date], any part of the system that is found to be defective in conformance with the applicable provisions of this chapter, the installation or modification plan, or the approvals, the part shall be repaired, renovated, replaced or removed.

Note: Section Comm 87.60 (5) (b) 4 also establishes management and maintenance requirements for a POWTS that is located in a governmental unit which participates in the replacement and rehabilitation program under s. 145.245, Stats.

Comm 83.52 RESPONSIBILITIES. (1) (a) The owner of a POWTS shall be responsible for ensuring that the operation and maintenance of the POWTS occurs in accordance with this chapter and the approved management plan under s. Comm 83.54 (1).

(b) The owner of a POWTS existing prior to [the effective date of this chapter . . . revisor to insert effective date], shall be responsible for ensuring that the maintenance of the POWTS occurs in accordance with s. Comm 83.54 (4).

(c) 1. The owner of a POWTS, including a POWTS existing prior to [the effective date of this chapter . . . revisor to insert effective date], shall maintain a maintenance or service contract with a POWTS maintainer or a business utilizing a POWTS maintainer for the POWTS as long as the POWTS is utilized and, if the management plan for the POWTS under s. Comm 83.54 (1) involves one or more of the following:

a. Evaluating or monitoring any part of the system at an interval of 12 months or less.

b. Maintaining any part of the system at an interval of 12 months or less.

2. The owner of a POWTS, including a POWTS existing prior to [the effective date of this chapter . . . revisor to insert effective date], shall maintain a maintenance or service contract with a certified septage servicing operator under ch. NR 114 for the POWTS as long as the POWTS is utilized and, if the management plan for the POWTS under s. Comm 83.54 (1) involves the servicing of any holding, treatment or dispersal component at an interval of 12 months or less.

(2) A POWTS, including a POWTS existing prior to [the effective date of this chapter . . . revisor to insert effective date], that is not maintained in accordance with the approved management plan or as required under s. Comm 83.54 (4) shall be considered a human health hazard.

(3) The activities relating to evaluating and monitoring mechanical POWTS components after the initial installation of the POWTS in accordance with an approved management plan shall be conducted by person who holds a registration issued by the department as a registered POWTS maintainer.

Note: See s. Comm 5.36 concerning the application and qualification requirements to become a registered POWTS maintainer.

Comm 83.53 GENERAL. (1) No product for chemical or physical restoration or chemical or physical procedures for POWTS, including a POWTS existing prior to [the effective date of this chapter . . . revisor to insert effective date], may be used unless approved by the department in accordance with ss. Comm 84.10 and 84.13.

(2) Nothing in this subchapter shall limit a governmental unit's authority and power in establishing a mandatory POWTS maintenance program, including management or maintenance undertaken by the governmental unit.

Comm 83.54 MANAGEMENT REQUIREMENTS. (1) MANAGEMENT PLAN. (a) The management plan for each POWTS shall include information and procedures for maintaining the POWTS to operate and function within the standards of this chapter and as designed and approved.

(b) The management plan for a POWTS shall be a part of the plan submittal under s. Comm 83.22 or 84.10.

(c) The management plan for POWTS shall specify all necessary maintenance and servicing information which may include, but is not limited to all of the following:

1. Accumulated solids or byproduct removal requirements.

2. Influent quantities and qualities and effluent quantities and qualities.

3. Metering, sampling and monitoring schedules and requirements.

4. Load and rest schedules.

5. Servicing frequency requirements.

6. Installation and inspection checklists.

7. Evaluation, monitoring and maintenance schedules for mechanical POWTS components.

8. Start up and shutdown procedures.

9. Procedure for abandonment.

(d) If the owner of the POWTS wishes to operate or maintain a POWTS differently than that specified in the approved management plan, a written request for approval to amend the management plan shall be submitted to the agency that initially reviewed the installation plan under s. Comm 83.22.

(2) METERING AND MONITORING. (a) General. The management plan specified in sub. (1) shall include the metering or monitoring of POWTS influent or effluent as specified in this subsection.

(b) Department option. The department may require the metering or monitoring of any POWTS to evaluate the operation of the POWTS.

(c) Required influent metering. Influent flow meters shall be installed in accordance with par. (d), if a POWTS:

1. Includes one or more holding tanks, except camping unit transfer containers;

2. Receives wastewater of a type exceeding the quality limits in s. Comm 83.44 (2), except from one- and 2-family dwellings; or

3. Is required by a POWTS component manufacturer.

(d) Metering influent flows. 1. Influent flows to POWTS shall be metered by one of the following methods:

a. Installing event counters and elapsed time meters.

b. Installing water meters to meter the water distribution system flow to the POWTS.

c. Metering wastewater flow from all parts of the plumbing system discharging to the POWTS.

d. Metering the water distribution system and metering exterior hydrant use, except as provided in subd. 2.

2. Where meters are installed on water distribution systems existing prior to [the effective date of this chapter . . . revisor to insert effective date], the entire water distribution system may be metered and the exterior hydrant usage estimated and subtracted from the total flow to meet the requirements of this paragraph.

(e) Monitoring influent and effluent loads. 1. When and where the monitoring of groundwater is required, groundwater monitoring wells constructed in accordance with ch. NR 141 shall be utilized.

2. When influent or effluent contaminants are to be monitored, samples shall be collected in accordance with the requirements of the approved management plan or, where no procedures are specified, in accordance with published sampling procedures accepted by the department.

Note: Acceptable sampling procedures include those contained in the following sources:

"Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Sites" EPA SW-611, Office of Water and Waste Management, U. S. Environmental Protection Agency, Dec. 1980, Washington, D. C.

"Techniques of Water Resources Investigations of the United States Geological Survey, Guidelines for Collection and Field Analysis of Ground Water Samples for Selected Unstable Constituents," Book I, Chapter D2, U. S. Geological Survey, Washington, D. C.

"Procedures for the Collection of Representative Water Quality Data from Monitoring Wells," Cooperative Groundwater Report 7, Illinois State Water Survey, 1981, Champaign, Illinois.

"Manual of Ground Water Sampling Procedures," NWWA/EPA Series, Robert S. Kerr Environmental Research Laboratory, 1981, Ada, Oklahoma.

"Groundwater Sampling Procedures Guidelines", Wisconsin DNR, PUBL-WR-153, February 1987.

"Groundwater Sampling Procedures Field Manual", Wisconsin DNR, PUBL-WR-168, September 1987.

3. All groundwater samples collected to evaluate influent or effluent quality, except samples collected for total coliform bacteria analysis and the field analyses for pH, specific conductance and temperature, shall be analyzed by a laboratory certified under s. 299.11, Stats., and rules adopted under that section.

4. The results of the analysis required under subd. 2. shall be maintained and reported as required in the approved management plan and in accordance with s. Comm 83.55 (1) (a).

(3) SERVICING REQUIREMENTS. (a) The management plan specified in sub. (1) shall reflect the servicing schedules of POWTS components as specified in this subsection.

(b) The servicing frequency of an anaerobic treatment tank for a POWTS shall occur at least when the combined sludge and scum volume equals 1/3 of the tank volume.

(c) The servicing frequency of a holding tank for a POWTS, except for camping unit transfer containers, shall occur at least when the wastewater of the tank reaches a level of one foot below the inlet invert of the tank.

Note: The servicing of POWTS holding and treatment components, including septic tanks and holding tanks, is required to be performed by licensed pumpers under chs. NR 113 and NR 114.

(4) EXISTING POWTS. (a) The servicing frequency of an anaerobic treatment tank for a POWTS existing prior to [the effective date of this chapter . . . revisor to insert effective date] shall occur at least when the combined sludge and scum volume equals 1/3 of the tank volume.

(b) The servicing of a holding tank for a POWTS existing prior to [the effective date of this chapter . . . revisor to insert effective date], except for camping unit transfer containers, shall occur at least when the wastewater of the tank reaches a level of one foot below the inlet invert of the tank.

(c) The servicing or maintenance of POWTS treatment components other than those under pars. (a) and (b) existing prior to [the effective date of this chapter . . . revisor to insert effective date] shall be provided in accordance with the requirements specified by the manufacturer or designer of the component.

(d) 1. A POWTS that exists prior to [the effective date of this chapter . . . revisor to insert effective date] and that utilizes a treatment or dispersal component consisting in part of in situ soil shall be visually inspected at least once every 3 years to determine whether wastewater or effluent from the POWTS is ponding on the surface of the ground.

2. The inspection required by subd. 1. shall be performed by one of the following:

a. A licensed master plumber.

b. A licensed master plumber-restricted service.

c. A certified POWTS inspector.

d. A certified septage servicing operator under ch. NR 114.

Comm 83.55 REPORTING REQUIREMENTS. (1) (a) The owner of a POWTS or his or her agent shall report to the department or department authorized agent at the completion of each inspection, maintenance or servicing event specified in the approved management plan, except for camping transfer containers.

(b) The owner of a POWTS existing prior to [the effect date of this chapter . . . revisor to insert effective date] or their agent shall report to the department or designated agent shall report to the department or designated agent the completion of each inspection, maintenance or servicing event required under s. Comm 83.54 (4), except for camping transfer containers.

(2) The inspection, maintenance and servicing reports required under sub. (1) shall be submitted to the department or designated agent:

(a) In a manner specified by the department or designated agent;

(b) Within 10 business days from the date of inspection, maintenance or servicing; and

(c) By the owner or the owner's agent.

(3) The inspection, maintenance and servicing reports required under sub. (1) shall include the following information:

(a) A POWTS identifying number.

(b) The location of the POWTS.

(c) The date of inspection, maintenance or servicing.

(d) The license, certification, or registration number of the individual performing the inspection, maintenance or servicing.

(e) Other information required by the approved management plan.

(4) The department or designated agent may require verification of any information contained in a inspection, maintenance and servicing report.

Note: This subsection does not require the maintaining of test data which is collected voluntarily and which is not being collected to determine compliance with this chapter.

(5) DEPARTMENT RESPONSIBILITY. (a) The department shall maintain records relating to the inspection, maintenance and servicing of POWTS as specified in this section for a period of not less than 6 years.

(b) Upon request by a governmental unit and the agreement of the department, the governmental unit may delegate to the department the responsibility to maintain records relating to the inspection, maintenance and inspection of POWTS as specified in this section.

Subchapter VI
RECOGNIZED METHODS AND TECHNOLOGIES

Comm 83.60 PURPOSE. (1) This subchapter identifies specific types of methods and technologies that have been recognized by the department under the voluntary product approval process in s. Comm 84.10 (3) to conform with subchs. IV and V and that may be utilized in the design of POWTS for a specific project.

Note: Subsection Comm 84.10 (3) delineates a process for the voluntary submittal of specific methods and technologies that are proposed to be utilized as POWTS holding, treatment or dispersal components and for the department's evaluation of such submittals. Methods and technologies recognized under this process may be utilized in any POWTS within the specifications and parameters of the method or technology. Methods and technologies recognized under this process do not require the submittal of data at the time of plan review and approval process under s. Comm 83.22 to substantiate the performance of the specific method or technology.

(2) This subchapter does not limit the use of other methods and technologies for POWTS or POWTS components the performance of which has been recognized under the plan review and approval process of s. Comm 83.22 or the voluntary product approval process of Comm 84.10 (3) or both.

Note: Section Comm 83.22 delineates the process for the submittal of a plan for a POWTS design to be utilized for a specific project at a specific site. Under this section methods and technologies for POWTS holding, treatment or dispersal components that have not been recognized under s. Comm 84.10 (3), require the submittal to the department of data or information to substantiate performance claims. The approval of a POWTS plan by the department under this section covers only a specific project at a specific site, and does not constitute the recognition of a method or technology for other projects or sites.

Comm 83.61 ACCEPTABLE METHODS AND TECHNOLOGIES. Pursuant to s. Comm 84.10 (3), the department recognizes at least the following methods and technologies to be utilized in the design of POWTS:

(1) Pressure Distribution Component Manual for Private Onsite Wastewater Treatment Systems, June 11, 1999.

(2) At-Grade Component Manual Using a Pressure Distribution System for Private Onsite Wastewater Systems, June 11, 1999.

(3) Mound Component Manual for Septic Tank Effluent for Private Onsite Wastewater Systems, June 11, 1999.

(4) Conventional Soil Absorption Component Manual for Private Onsite Wastewater Systems, June 11, 1999.

(5) Holding Tank Component Manual for Private Onsite Wastewater Systems, June 11, 1999.

(6) Single Pass Sand Filter Component Manual for Private Onsite Wastewater Systems, June 25, 1999.

(7) Recirculating Sand Filter Component Manual for Private Onsite Wastewater Systems, June 25, 1999.

(8) Split Bed Recirculating Sand Filter System Component Manual for Private Onsite Wastewater Treatment Systems, June 25, 1999.

(9) Drip-Line Effluent Dispersal Component Manual for Private Onsite Wastewater Treatment Systems, June 24, 1999.

Note: See appendix for information on obtaining copies of the above from the department. Subsection Comm 84.10 (3) (e) delineates the circumstances under which additional methods or technologies will be specifically enumerated under this section, s. Comm 83.61.

Comm 83.62 PARAMETERS FOR USING ACCEPTABLE METHODS AND TECHNOLOGIES. When a design of a POWTS for a specific project utilizes a method or technology recognized under s. Comm 84.10 (3), a deviation from the specifications and limitations relative to the installation and maintenance of that method or technology shall constitute a violation of this chapter.

Subchapter VII
Department Performance Monitoring

Comm 83.70 PURPOSE. (1) To address the desire for an ongoing source of information on the performance of POWTS system designs, the department shall maintain an ongoing performance-monitoring program for the various POWTS methods and technologies. The monitoring program shall be in addition to the periodic inspection and monitoring of POWTS under subch. V. The monitoring program shall be coordinated by the department in conjunction with the ongoing POWTS experimental and research program.

(2) The purpose of the performance monitoring program is to:

(a) Provide additional information on the long-term performance of the various POWTS methods and technologies, to confirm their reliability, and to provide data for improvements; and

(b) Monitor the various methods and technologies relative to long term compliance with the groundwater standards.

Comm 83.71 DEPARTMENT PROCEDURES. (1) Both currently installed POWTS and newly installed POWTS may be included in the performance monitoring program conducted by the department.

(2) The department may include both the performance of individual POWTS treatment components as well as the output of components at the edge of the design treatment zone as part of the monitoring program.

(3) The department shall support the performance monitoring program from Wisconsin Fund allocations and program revenue funds generated from POWTS plan review and sanitary permits. If funds for this purpose become available from other sources, those funds may be used to support the monitoring program.

(4) The department shall utilize the technical advisory committee assembled under s. Comm 84.10 (3) (c) 2. to advise the department on the performance monitoring program. The committee shall advise the department in at least the following areas:

(a) Development of performance monitoring protocols.

(b) Selection of the POWTS methods and technologies to be monitored.

(c) Identification of funding sources.

(d) The interpretation of the results of the monitoring program.

(5) The decision by the department on the number, types, and locations of methods and technologies to be monitored shall take into consideration at least the following factors:

(a) The availability of other scientific data on the performance of a specific method or technology.

(b) The number times of each method or technology may be utilized annually.

(c) The likelihood that the method or technology will be adapted for soil and site conditions not previously utilized.

(d) The availability of funds.

(e) The risk factors associated with public health concerns and groundwater and surface water standards.

(6) The initial performance monitoring program undertaken by the department shall emphasize at least the following two circumstances:

(a) Monitoring where there is a high density of systems.

Note: The initial focus would be on subdivisions with lots of 1.5 acres or less.

(b) Monitoring where the depth of suitable in situ soil is near the minimum 6 inches specified under s. Comm 83.44 (3) (b) 1.

(7) (a) The department shall prepare an annual written report of performance monitoring activities undertaken and the results of those activities.

(b) The report under par. (b) shall be prepared annually and provided to the groundwater coordinating council assembled under s.160.50, Stats.

(c) The department shall prepare the first report no later than December 31, 2001.

Chapter Comm 83
Appendix

The material and information contained in this appendix is for clarification purposes only. Appendix material and information are numbered to correspond to the rule number as it appears in the text of the code. Material and information included in this appendix is subject to change without notice, including names, addresses, phone numbers and forms, and reflects information known at the time of publication.

A-83.21 (2) APPLICATION. The specific format of a sanitary permit application is specified by the department and may change depending on the data tracking needs of the department. The uniform application form issued by the department is to be used by all permit issuing agents. It may consist of a paper or electronic format, or both. The sanitary permit application form will require the applicant to report information pertinent to the ownership, use, location, system type, maintenance schedule, and responsible installer. Additionally, plans and specifications for the project must also be submitted with, and are part of, the permit application. Fees for the sanitary permit are based on a statutory minimum as cited in s. 145.19(2), Wis. Stats. and any additional costs levied by the issuing agent.

A-83.21 (3) PROCESSING. The state sanitary permit is issued when evidence and documentation is presented by the owner of the property that minimum code standards have been or will be met.

[Insert sample form of sanitary permit]

Chapter 145 Wisconsin Statutes provides some direction as to the issuance of sanitary permits as follows:

145.135 Sanitary permits.

(1) Validity. In this section, "sanitary permit" means a permit issued by the department or any governmental unit responsible for the regulation of private sewage systems for the installation of a private sewage system. No person may install a private sewage system unless the owner of the property on which the private sewage system is to be installed holds a valid sanitary permit. A sanitary permit is valid for 2 years from the date of issue and renewable for similar periods thereafter. A governmental unit responsible for the regulation of private sewage systems may not charge more than one fee for a sanitary permit or the renewal of a sanitary permit in any 12-month period. A sanitary permit shall remain valid to the end of the established period, notwithstanding any change in the state plumbing code or in any private sewage system ordinance during that period. A sanitary permit may be transferred from the holder to a subsequent owner of the land, except that the subsequent owner must obtain a new copy of the sanitary permit from the issuing agent. The results of any percolation test or other test relating to the disposal of liquid domestic wastes into the soil shall be retained by the governmental unit responsible for the regulation of private sewage systems where the property is located. The governmental unit responsible for the regulation of private sewage systems shall make the test results available to an applicant for a sanitary permit and shall accept the test results as the basis

for a sanitary permit application unless the soil at the test site is altered to the extent that a new soil test is necessary.

(2) Notice. A sanitary permit shall include a notice displayed conspicuously and separately on the permit form, to inform the permit holder that:

(a) The purpose of the sanitary permit is to allow installation of the private sewage system described in the permit.

(b) The approval of the sanitary permit is based on regulations in force on the date of approval.

(c) The sanitary permit is valid and may be renewed for a specified period.

(d) Changed regulations will not impair the validity of a sanitary permit.

(e) Renewal of the sanitary permit will be based on regulations in force at the time renewal is sought, and that changed regulations may impede renewal.

(f) The sanitary permit is transferable.

145.19 Sanitary permit.

(1) Requirement; information; forms. No septic tank may be purchased and no private sewage system may be installed unless the owner of the property on which the private sewage system is to be installed holds a valid sanitary permit from the governmental unit responsible for the regulation of private sewage systems in which the property is located. The department shall prescribe the information to be included in the sanitary permit and furnish sanitary permit forms to the governmental unit. The applicant shall submit the completed sanitary permit to the governmental unit. The governmental unit shall approve or disapprove the sanitary permit according to the rules promulgated by the department under this chapter. No person may sell at retail, as defined under s. 100.201 (1) (d) , a septic tank for installation in this state unless the purchaser holds a valid sanitary permit issued under this section.

(2) Fee. No fee for a sanitary permit may be less than $61, or the amount determined under department rule. The governing body for the governmental unit responsible for the regulation of private sewage systems may establish a fee for a sanitary permit which is more than $61, or the amount determined under department rule.

(3) Copy of permit forwarded to the department. The governmental unit responsible for the regulation of private sewage systems shall forward a copy of each valid sanitary permit and $20, or the amount determined under department rule, of the fee to the department within 90 days after the permit is issued.

(4) Use of fee. The portion of this fee retained by the governmental unit responsible for the regulation of private sewage systems shall be used for the administration of private sewage system programs.

(5) Fee adjustment. The department, by rule promulgated under ch. 227 , may adjust the minimum permit fee under sub. (2) and the fee portion forwarded under sub. (3).

(6) Groundwater fee. In addition to the fee under sub. (2) , the governmental unit responsible for the regulation of private sewage systems shall collect a groundwater fee of $25 for each sanitary permit. The governmental unit shall forward this fee to the department together with the copy of the sanitary permit and the fee under sub. (3) . The moneys collected under this subsection shall be credited to the environmental fund for environmental management.

A-83.21 (6) RENEWALS. Sanitary permit renewals are completed in compliance with s.145.135 (1) and 145.135 (2) (e), Wis. Stats. A completed sanitary permit renewal application form must be submitted to the local permit issuing agent.

[Insert sample renewal form]

A-83.22 (2) PLANS AND SPECIFICATIONS. A POWTS plan review application form must be completed and submitted with a plan submittal. The application form is uniform state-wide and includes a worksheet to calculate the appropriate fees for the project.

[Insert sample plan review application form]

A-83.22 (3) PLAN REVIEW PROCESS. All proposed POWTS installations require plan review prior to sanitary permit issuance. Projects subject to department review include all projects under Table 83.22-1, and many of the projects under Table 83.22–2. Designated agents may review projects included in Table 83.22-2.

[Insert current county agent plan review listing]

Commerce Plan Review Offices

Hayward Office
10541 N Ranch Rd
Hayward WI 54843
(715) 634-4870

LaCrosse Office
4003 N Kinney Coulee Rd
LaCrosse WI 54603
(608) 785-9334

Madison Office
201 W. Washington Ave
PO Box 7162
Madison WI 53707-7162
(608) 266-3151

Shawano Office
1340 Green Bay Street
Suite 300
Shawano WI 54166
(715) 524-3626

Green Bay Office
2331 San Luis Place
Green Bay WI 54304
(920) 492-5601

Waukesha Office
401 Pilot Court Ste C
Waukesha WI 53188
(262) 548-8606

A-83.25 (2) ISSUANCE OF BUILDING PERMITS. A building permit is defined in s. Comm 81.01 (43), Wis. Adm. Code, as any written permission from a municipality that allows construction to commence on a structure. In effect, this means that land use and zoning permits, as well as other similar permits that constitute permission to construct are considered building permits.

Prior to building permit issuance, the issuing agent has a statutory responsibility, under s. 66.036, Wis. Stats., to consider whether or not the proposed structure requires connection to a private onsite wastewater treatment system (POWTS), or if the construction will interfere with the operation of an existing POWTS.

> Section 66.036, Stats. Building on unsewered property. (1) No county, city, town or village may issue a building permit for construction of any structure requiring connection to a private domestic sewage treatment and disposal system unless a system satisfying all applicable regulations already exists to serve the proposed structure or all permits necessary to install such a system have been obtained.
>
> (2) Before issuing a building permit for construction on any structure on property not served by a municipal sewage treatment plant, the county, city, town or village shall determine that the proposed construction does not interfere with a functioning private domestic sewage treatment and disposal system. The county, city, town or village may require building permit applicants to submit a detailed plan of the owner's existing private domestic sewage treatment and disposal system.

A-83.25 (2) (e) Setbacks. Horizontal setbacks from encumbrance for new POWTS installations are in conformance with Table Comm 83.43 –1 or the rules in effect at the time the system was installed, which ever is less. For setback distances associated with previous administrative codes refer to the previous code issue or the following table.

[Insert Table on previous code setbacks]

A-83.43 (6) COMMERCIAL FACILITIES. Table A-83.43-1 may be used to estimate wastewater flows from a commercial building.

Table A-83.43-1
Public Facility Wastewater Flows

Source	Unit	Estimated Wastewater Flow (gpd)
Apartment or Condominium	Bedroom	100
Assembly hall (no kitchen)	Person (10 sq. ft./person)	1.3
Bar or cocktail lounge (no meals served)	Patron (10 sq. ft./patron)	4
Bar or cocktail lounge* (w/meals – all paper service)	Patron (10 sq. ft./patron)	8
Beauty salon	Station	90
Bowling alley	Bowling lane	80
Bowling alley (with bar)	Bowling lane	150
Camp, day and night	Person	25
Camp, day use only (no meals served)	Person	10
Campground or Camping Resort	Space, with sewer connection and/or service building	30
Campground sanitary dump station	Camping unit or RV served	25
Catch basin	Basin	65
Church (no kitchen)	Person	2
Church* (with kitchen)	Person	5
Dance hall	Person (10 sq. ft./person)	2
Day care facility (no meals prepared)	Child	12
Day care facility* (with meal preparation)	Child	16
Dining hall* (kitchen waste only without dishwasher and/or food waste grinder)	Meal served	2
Dining hall* (toilet and kitchen waste without dishwasher and/or food waste grinder)	Meal served	5
Dining hall* (toilet and kitchen waste with dishwasher and/or food waste grinder)	Meal served	7
Drive-in restaurant* (all paper service with inside seating)	Patron seating space	10
Drive-in restaurant* (all paper service without inside seating)	Vehicle space	10
Drive-in theater	Vehicle space	3
Employees (total all shifts)	Employee	13
Floor drain (not discharging to catch basin)	Drain	25
Gas station / convenience store	Patron	3

Table A-83.43-1
Public Facility Wastewater Flows
(continued)

Source	Unit	Estimated Wastewater Flow (gpd)
Gas station (with service bay) Patron Service bay	 Patron Service bay	 3 50
Hospital*	Bed space	135
Hotel, motel or tourist rooming house	Room	65
Medical office building Doctors, nurses, medical staff Office personnel Patients	 Person Person Person	 50 13 6.5
Migrant labor camp (central bathhouse)	Employee	20
Mobile Home (Manufactured home) (served by its own POWTS)	Bedroom	100
Mobile home park	Mobile home site	200
Nursing, Rest Home, Community Based Residential Facility	Bed space	65
Outdoor sport facilities (toilet waste only)	Patron	3.5
Parks (toilets waste only)	Patron (75 patrons/acre)	3.5
Parks (toilets and showers)	Patron (75 patrons/acre)	6.5
Public shower facility	Shower taken	10
Restaurant*, 24-hr. (dishwasher and/or food waste grinder only)	Patron seating space	4
Restaurant*, 24-hr. (kitchen waste only without dishwasher and/or food waste grinder)	Patron seating space	12
Restaurant, 24-hr. (toilet waste)	Patron seating space	28
Restaurant*, 24-hr. (toilet and kitchen waste without dishwasher and/or food waste grinder)	Patron seating space	40
Restaurant*, 24-hr. (toilet and kitchen waste with dishwasher and/or food waste grinder)	Patron seating space	44
Restaurant* (dishwasher and/or food waste grinder only)	Patron seating space	2
Restaurant* (kitchen waste only without dishwasher and/or food waste grinder)	Patron seating space	6
Restaurant (toilet waste)	Patron seating space	14
Restaurant* (toilet and kitchen waste without dishwasher and/or food waste grinder)	Patron seating space	20
Restaurant* (toilet and kitchen waste with dishwasher and/or food waste grinder)	Patron seating space	22
Retail store	Patron (70% of total retail area ÷ 30 sq. ft. per patron)	1
School* (with meals and showers)	Classroom (25 students/classroom)	500
School* (with meals or showers)	Classroom (25 students/classroom)	400

Table A-83.43-1 Public Facility Wastewater Flows (continued)		
Source	**Unit**	**Estimated Wastewater Flow (gpd)**
School (without meals or showers)	Classroom (25 students/classroom)	300
Self-service laundry (toilet waste only)	Clothes washer	33
Self-service laundry (with only residential clothes washers)	Clothes washer	200
Swimming pool bathhouse	Patron	6.5

* = May be high strength waste

A-83.43 (6) (a). Actual meter readings may be used to calculate the combined estimated design wastewater flow from a dwelling. To calculate the estimated design wastewater flow use the following formula and compare the answer to the peak metered flow. Choose the larger of the two estimated design flows.

(total meter flow/number of readings)(1.5) = estimated design wastewater flow

The frequency of meter readings should be daily for commercial.

A-83.43 (6) (b) A detailed per capita and per function flow may be established for commercial facilities. The per function flow ratings shall be substantiated by manufactures data of the per function flow and detailed use data from the facility in question or a similar facility under similar conditions of use. Estimated design wastewater flow shall be at least 1.5 times the total estimated daily flow calculated from the per capita and per function flow information

A-83.43 (7) ESTIMATING CONTAMINANT LOADS

Pathogenic contaminant load may be estimated based on data collected by a reputable testing or research facility.

Typical Data on the Unit Loading Factors and Expected Wastewater Contaminant Loads from Individual Residences

Contaminant	Unit Loading Factor lb/capita per day	Value		
		Unit	Range	Typical
BOD_5	0.180	mg/L	216-540	392
SS	0.200	mg/L	240-600	436
NH3 as N	0.007	mg/L	7-20	14
Org. N as N	0.020	mg/L	24-60	43
TKN as N	0.027	mg/L	31-80	57
Org P as P	0.003	mg/L	4-10	7
Inorg. P as P	0.006	mg/L	6-17	12
Grease		mg/L	45-100	70
Total Coliform		cfu/100mL	10^7-10^{10}	10^8

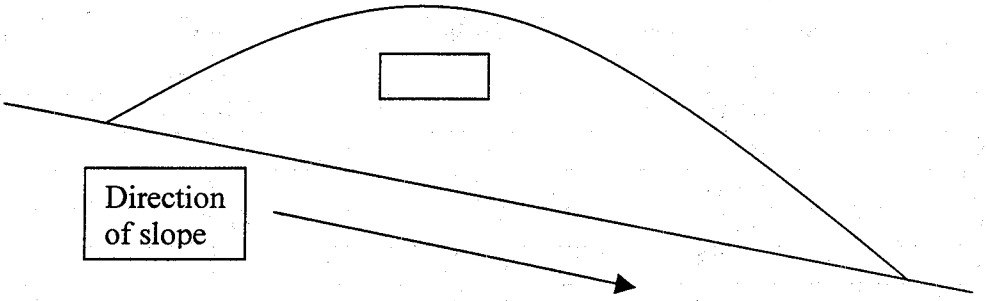
A-83.43 (8) (g) ANCHORING SYSTEM COMPONENTS.

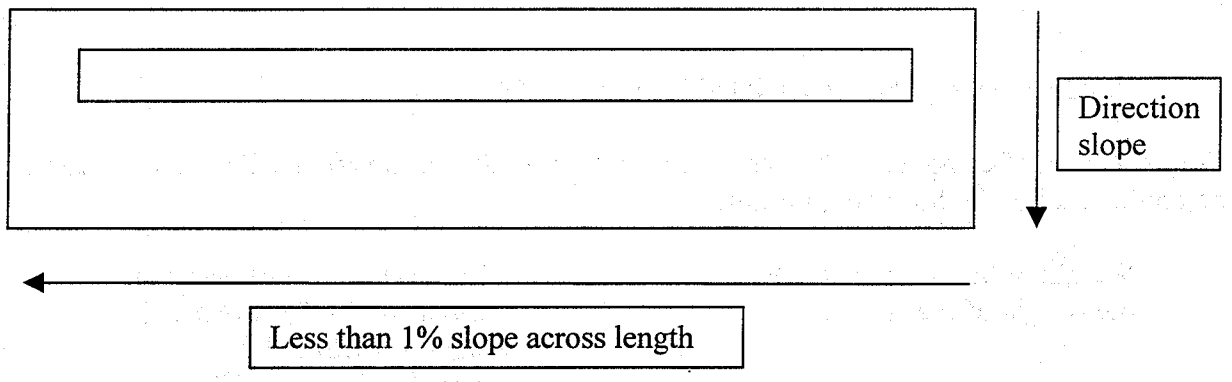
The anchoring of components to counter buoyant forces due to saturated soil conditions can be determined using the following formula:

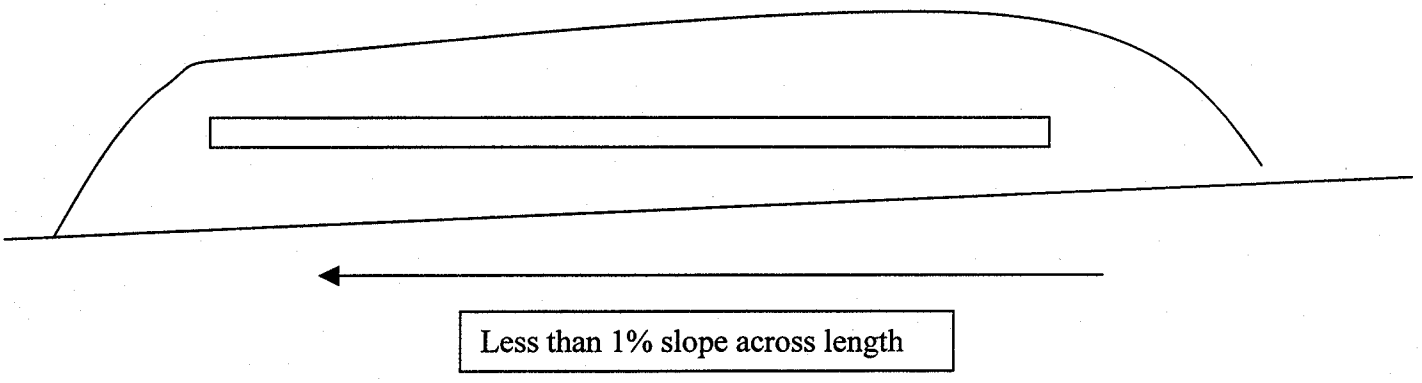
Weight of the component plus the weight of the anchor	=	1.5 times (volume of water the component displaces) times [the weight of water (62.4 pounds/cubic foot at 39°F)]

A-83.44 ORIENTATION (6)

Orientation of above grade dispersal structures is on the contour except that a 1% cross slope is acceptable along the length as shown below.







SECTION 57. Comm 84.10 Table 84.10 line 5 is amended to read:

Table 84.10
SUBMITTALS TO DEPARTMENT
(Partial Table)

	Product Categories
5.	Prefabricated ~~septic/holding tanks~~ holding or treatment components for POWTS

SECTION 58. Comm 84.10 (3) is repealed and recreated to read:

Comm 84.10 (3) VOLUNTARY POWTS COMPONENT REVIEW. (a) The department may issue an approval, upon request and review, for specific methods or technologies that are proposed to be utilized as POWTS holding, treatment or dispersal components which conform to the standards or specifications referenced in chs. Comm 81, 82, 83 and this chapter, but do not require approval under sub. (2) or s. Comm 84.50.

(b) Each request for approval shall be made on a form provided by the department.

Note: See appendix for a reprint of the form and addresses of the department where the form may be obtained.

(c) The submittal shall be accompanied by sufficient data and information to determine if the method or technology complies with the provisions of chs. Comm 81, 82 and 83, and this chapter. The submittal shall include, but not be limited to, all of the following:

1. Plans and specifications.

2. Theory of operation.

3. Testing protocol.

4. Testing data.

5. Limits of reliable operation.

6. Installation requirements and procedures.

7. Inspection checklist and worksheet.

8. Inspection requirements and procedures.

9. Operation and maintenance requirements.

10. Operation and maintenance schedule.

11. Operation and maintenance checklist and worksheet.

(d) 1. The department shall review a submittal under this subsection with input from a technical advisory committee.

2. The members on the technical advisory committee under subd. 1. shall be appointed by the department for staggered 3-year terms and shall include representatives of at least the following groups or organizations:

a. The department of natural resource.

b. Local governmental unit.

c. POWTS designer.

d. Academic or scientific community.

e. Plumber.

f. Environmental group.

g. POWTS component manufacturer.

(e) 1. After review by the technical advisory committee under par. (d) but prior to issuing an approval under pars. (f), the department shall seek public comments on a submittal under this subsection.

2. a. The department shall place the notice requesting public comment under subd. 1. in the official state newspaper.

Note: The official state newspaper at the time this rule goes into effect, [revisor to insert effective date], is the Wisconsin State Journal.

b. The department shall include a time limit for public comment in each notice.

3. If the department receives a significant amount of public comment under subd. 2., the department may elect to recognize the specific method or technology through the rule-making process under ch. 227, Stats., and to cite the recognition in s. Comm 83.61.

(f) 1. If, upon review, the department determines that the method or technology conforms to the provisions of chs. Comm 81, 82 and 83 and this chapter, the department shall issue an approval in writing.

2. The department may impose specific conditions in granting an approval, including a provision to provide training to POWTS installers and POWTS inspectors.

3. Violations of the conditions under which an approval is granted shall constitute a violation of this chapter.

(g) If, upon review, the department determines that the method or technology does not conform to the provisions of chs. Comm 81, 82 and 83 and this chapter, the request for approval shall be denied in writing.

(h) The department shall review and make a determination on an application for a method or technology approval within 3 months of receipt of all fees, plans, drawings, specifications and other information required to complete the review, unless the department elects to review the method or technology as part of the rule-making process under ch. 227, Stats.

(i) If an approved method or technology is modified or additional assertions of function or performance are made, the approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.

SECTION 59. Comm 84.11 is amended to read:

Comm 84.11 IDENTIFICATION. Each length of pipe and each pipe fitting, trap, fixture, material, device and product to be used in plumbing shall be marked as required by the applicable standard specified by reference in this chapter or as specified ~~in s. Comm 83.15 for septic tanks and holding tanks, and s. Comm 84.20 (5) (o) for water treatment devices~~ by rule in this chapter.

SECTION 60. Comm 84.20 (5) (j) to (q) is renumbered 84.20 (5) (k) to (r).

SECTION 61. Comm 84.20 (5) (j) is created to read:

Comm 84.20 (5) (j) POWTS design packages and POWTS components. POWTS design packages and POWTS components shall function and perform in accordance with assertions submitted to and approved by the department under s. Comm 84.10.

SECTION 62. Comm 84.20 (5) (q) 1., as renumbered, Note is created to read:

Comm 84.20 (5) (q) 1. Note: See s. Comm 82.40 for limitations as to the types of water treatment devices which may discharge to a POWTS.

SECTION 63. Comm 84.25 is created to read:

Comm 84.25 POWTS HOLDING COMPONENTS OR TREATMENT COMPONENTS. (1) GENERAL. All POWTS holding components or treatment components shall conform to the requirements of this section.

(2) WATER TIGHTNESS. (a) General. Tank assemblies, including fittings and access openings, shall be manufactured to be water tight as required under this subsection.

(b) Concrete tanks. 1. Where concrete tanks are required to have covers, the tanks shall meet one of the following requirements:

a. Withstand a vacuum of at least 2 inches of mercury for 60 minutes, without loss of pressure.

b. Hold water for one hour, without leakage after the tank has been filled with water to the top of the cover and let stand for 24 hours, then refilled to the top of the cover.

2. Concrete tanks that are not required to have a cover shall hold water for one hour, without leakage after the tank has been filled with water and let stand for 24 hours, then refilled to the highest liquid level required to be held in the tank.

(c) Steel tanks. 1. Steel tanks that are required to have a cover shall be capable of withstanding one of the following requirements:

a. An internal air pressure of at least 5 psig for 15 minutes, without loss of pressure.

b. An internal water pressure of at least 5 psig for 60 minutes, without loss of pressure.

2. Steel tanks that are not required to have a cover shall be capable of holding water after being filled to their inlet or outlet, whichever is higher, for 24 hours without loss of water.

(d) Tanks constructed of materials other than concrete or steel. 1. Tanks constructed of materials other than concrete or steel that are required to have a cover shall be capable of withstanding one of the following requirements:

a. A vacuum of at least 2 inches of mercury for 60 minutes, without loss of pressure.

b. An internal air pressure of at least 5 psig for 15 minutes, without loss of pressure.

c. An internal water pressure of at least 5 psig for 60 minutes, without loss of pressure.

2. Tanks constructed of materials other than concrete or steel that are not required to have a cover shall be capable of holding water after being filled to their inlet or outlet, whichever is higher, for one hour without loss of water.

(3) STRENGTH. Tank assemblies, including fittings and access openings, shall be capable of withstanding loads and pressures that the tanks are intended to encounter and remain watertight.

(4) PROTECTION FROM ELEMENTS. (a) Concrete tanks. 1. The interior of a concrete tank assembly, including fittings and access openings, shall have a protective coating or be constructed of material, above the lowest liquid level expected in the tank, that will inhibit the deterioration of the concrete due to internal environmental effects.

2. Under subd. 1., concrete with a water cement ratio not exceeding 0.45 shall be considered resistant to deterioration due to internal environmental effects.

(b) Steel tanks. 1. Steel tank assemblies, including fittings and access openings, shall have a protective coating that will inhibit the deterioration of the steel due to internal and external environmental effects.

2. Steel tank assemblies, including fittings and access openings, installed underground shall be provided with cathodic protection in accordance with UL Standard 1746 or STI-P_3.

(c) Tanks constructed of materials other than concrete or steel. Tank assemblies, including fittings and access openings, constructed of materials other than concrete or steel shall be protected against deterioration due to internal and external environmental effects.

(5) VENTING. (a) Each tank, except camping unit transfer containers, shall be provided with a means of venting gases formed inside of the tank to the atmosphere.

(b) The tank vent shall terminate in accordance with s. Comm 82.31 (16).

(6) PIPE CONNECTION. All pipe connection openings to a tank shall be designed to allow connections in accordance with s. Comm 84.40.

(7) ACCESS. (a) Each covered tank shall be provided with one or more openings of sufficient size and located in such a manner to provide a means for inspection or required servicing or maintenance of the tank.

(b) Inspection openings for tanks located below ground shall extend at least to the finished grade.

(c) Servicing and maintenance openings for treatment tanks located below ground shall extend to at least within 6 inches below finished grade.

(d) Servicing and maintenance openings for holding components shall comply with all of the following:

1. Extend to at least 4 inches above finished grade when the holding component is below ground.

2. Be located to allow inspection and maintenance of pumps or siphons located in the holding component.

(e) Inspection, maintenance and servicing openings shall terminate with a means that prevents entrance of deleterious materials.

(f) Covers located at or above ground for openings larger than 8 inches in diameter shall be provided with locking devices and shall remain locked except for cleaning or maintenance purposes.

(8) WARNING LABEL. (a) Covers for all tank openings larger than 8 inches in diameter shall be provided with a permanent warning label indicating the dangers of entering the tank, in accordance with this subsection.

(b) The warning label shall be securely attached and made of a noncorrosive metal or plastic bearing the legend "DO NOT ENTER WITHOUT PROPER EQUIPMENT" or "DANGEROUS GASES EXIST IN TANK" or similar language.

(c) The label shall be rectangular in shape with minimum dimensions of 4 by 5 inches.

(d) The wording on the label shall be a minimum of ½ inch in height and be either indented or raised.

(9) DOSING APPARATUS. (a) Pumps for POWTS used to disperse air, treated wastewater or final effluent shall be rated by the pump manufacturer for such use.

(b) Siphons for POWTS shall be rated by the siphon manufacturer for wastewater use.

(c) All other dosing apparatus for POWTS shall be constructed of corrosive resistant materials and designed to perform as intended.

(10) ALARM SYSTEM. (a) All pump and alarm controls for POWTS shall be specifically designed by the manufacturer for such use.

(b) The use of pressure diaphragm switches in POWTS tanks shall be prohibited.

(11) TANK LABEL. (a) Anaerobic tanks. Each anaerobic treatment tank or holding component shall be labeled near an inlet or outlet opening. The label shall be embossed, impressed, or securely attached to the tank. The label shall include all of the following information:

1. Name or trademark of the manufacturer.

2. Capacity of each compartment.

3. Manufacturer's model number.

(b) Aerobic tanks. 1. Each aerobic treatment tank shall be provided with 2 label plates. Label plates shall be inscribed to be easily read and understood, and be securely attached.

2. One label plate shall be attached to the front of the electrical control box. The second label plate shall be attached to the aeration equipment assembly, tank, or riser at a location normally subject to access during inspection of the unit.

3. Each label plate shall include all of the following information:

a. Name or trademark of the manufacturer.

b. Model number.

c. Rated daily flow capacity of the unit.

(12) OTHER TREATMENT COMPONENTS. A treatment component not specifically covered in this section may not be sold for use in a POWTS or may not be installed in a POWTS, unless it has received department approval and conforms to the applicable performance standards of this chapter and chs. Comm 82 and 83, and ch. 145, Stats.

SECTION 64. Comm 84.30 (2) (d) is repealed and recreated to read:

Comm 84.30 (2) (d) Treated wastewater piping. 1. Nonpressurized, nonperforated drain piping conveying treated wastewater from a POWTS treatment or holding component to a POWTS treatment or holding component, distribution cell or dispersal zone shall conform to one of the standards listed in Table 84.30-3.

2. Nonpressurized perforated drain piping conveying treated wastewater in a POWTS soil treatment or dispersal component shall conform to one of the standards listed in Table 84.30-4.

3. Pressurized perforated drain piping conveying treated wastewater in a POWTS treatment or dispersal component shall conform to one of the standards listed in Table 84.30-5 and shall be perforated in accordance with the POWTS design.

SECTION 65. Comm 84.30 Table 84.30-5 is amended to read:

Table 84.30-5
PRESSURIZED DRAIN PIPE AND TUBING
AND SERVICE SUCTION LINES

Material	Standard
Acrylonitrile butadiene styrene (ABS)[a]	ASTM D1527; ASTM D2282; ASTM D2661; ASTM F628
~~Acrylonitrile butadiene styrene (ABS) composite~~[a]	~~ASTM D2680~~
Brass	ASTM B43
Cast iron	ASTM A74; ASTM A377; AWWA C115/A21; CISPI 301
Chlorinated polyvinyl chloride (CPVC)[a]	ASTM 2846; ASTM F441; ASTM F442
Concrete	ASTM C14; ASTM C76
Copper[b]	ASTM B42; ASTM B88; ASTM B306
Ductile iron	ASTM A377; AWWA C115/Z21.15; AWWA C151/A21.51
Galvanized steel	ASTM A53
Polyvinyl chloride (PVC)a	ASTM D1785; ASTM D2241; ASTM D2665; ASTM 2672; AWWA C900
Stainless steel	ANSI B36.19M; ASTM A270; ASTM A450

Note a: Thermoplastic sewer pipe shall be installed in accordance with ASTM D2321.
Note b: Copper tubing , type M, may not be installed underground.

SECTION 66. Comm 84.30 (6) (g) to (j) and Table 84.30-12 are created to read:

Comm 84.30 (6) (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 84.30-12.

Table 84.30-12
GEOTEXTILE FABRICS

Property	Test Method	Minimum Average Roll Value
Grab Tensile, lbs	ASTM D4632	35 lbs, minimum
Grab Elongation, %	ASTM D4632	50%, minimum
Puncture, lbs	ASTM D4833	10 lbs, minimum
Trapezoidal tear, lbs	ASTM D4533	11 lbs, minimum
AOS, US Sieve #	ASTM D4751	20 US sieve #, minimum
AOS, US Sieve #	ASTM D4751	70 US sieve #, maximum

(h) Leaching chambers. Leaching chambers for distribution cell components of POWTS 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 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 2-1/2 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 which is used as a filtering medium in a treatment or distribution cell of a POWTS shall conform to ASTM Standard C33 for fine aggregate.

SECTION 67. Comm 84.50 (3) (g) 1 and 7 are amended to read:

Comm 84.50 (3) (g) 1. Plans detailing the installation of the plumbing material or product shall be submitted to the department in accordance with s. Comm 82.20 (4) or ~~83.07 (2)~~ 83.22.

Comm 84.50 (3) (g) 7. Five years after the date of the completed installation the department shall within 6 months order the removal of the plumbing material or product ~~or~~, issue an ~~alternate~~ approval, or renew the experimental approval for another 5-year period to obtain additional information to determine the result of the experiment.

SECTION 68. Comm 84.60 is repealed.

SECTION 69. A-84.10 (3) (b) is created to read:

A-84.10 (3) (b) Request forms for voluntary POWTS products approval may be obtained at the following locations:

Department of Commerce Offices

Madison Office
201 W. Washington Ave
PO Box 7162
Madison, WI 53707-7162
608) 266-3151

(Insert sample form approval request)

SECTION 70. Chapter Comm 85 is repealed and recreated to read:

Chapter Comm 85

SOIL AND SITE EVALUATIONS

Comm 85.01 PURPOSE. The purpose of this chapter is to establish the minimum requirements for evaluating and reporting soil and site characteristics that may affect treatment or dispersal of wastewater, treated wastewater, final effluent or nonwater-carried human wastes.

Comm 85.02 SCOPE. Pursuant to s. 145.02, Stats., this chapter applies to all soil and site evaluations conducted relative to the treatment or dispersal of wastewater, treated wastewater, final effluent or nonwater-carried human wastes into soil.

Comm 85.10 QUALIFICATIONS. (1) SOIL EVALUATION. A soil evaluation for treatment or dispersal of wastewater, treated wastewater, final effluent or nonwater-carried human wastes regulated by chs. Comm 83 and 91 shall be performed by an individual who is a certified soil tester.

Note: Section Comm 5.33 delineates the qualifications and certification procedures for certified soil testers.

(2) SITE EVALUATION. A site evaluation, relative to the installation of a POWTS treatment, holding or dispersal component location, or to determine land slope or setback distances to topographic or other site features shall be performed by a Wisconsin registered architect, professional engineer, designer of plumbing systems, designer of private sewage systems or land surveyor; a certified soil tester or POWTS inspector; or a licensed master plumber or master plumber-restricted service.

(3) SOIL SATURATION DETERMINATIONS. Soil saturation determinations may only be conducted and reported by an individual who is a certified soil tester.

Comm 85.20 SOIL EVALUATIONS. (1) GENERAL. (a) Soil boring methods and procedures shall comply with this section.

(b) Maximum soil application rates shall be determined relative to the soil texture, structure and consistence for each soil horizon or layer.

Note: Section Comm 83.44 establishes maximum soil application rates and soil treatment capability for the design of POWTS treatment or dispersal components consisting in part of in situ soil.

(2) NUMBER, TYPE AND DEPTH OF EVALUATIONS. (a) General. The number, type, depth and location of soil profile evaluations shall be sufficient to delineate the area under investigation and to assure consistency of the data within that area.

(b) Number and area. 1. a. Except as provided in subpar. d. and subd. 2., a minimum of 3 soil profile evaluation excavations shall be used to delineate a site within which POWTS treatment or dispersal components consisting in part of in situ soil are to be located.

b. For estimated daily flows of 1,000 gallons per day or less, at least one soil profile evaluation excavation per treatment or dispersal site shall be constructed as a soil pit, and described in accordance with s. Comm 85.30 (1) (c).

c. For estimated daily flows greater than 1,000 gallons per day, at least three soil profile evaluations per treatment or dispersal site shall be constructed as soil pits, and described in accordance with s. Comm 85.30 (1) (c).

d. The department or governmental unit may require additional soil profile evaluation excavations to be constructed where soil variability considerations may not be adequately addressed. The department or governmental unit may specify that soil profile descriptions in accordance with s. Comm 85.30 (1) (c) be conducted for any additional soil profile evaluation excavations.

2. At least one soil pit or soil boring shall be used to establish soil suitability for a pit privy.

Note: Sections Comm 83.44 (3) and 91.12 (1) (b) 1. contain further information regarding privy siting and soil requirements.

(c) Type. 1. Soil profile evaluations used to determine soil application rates shall be conducted using soil pits.

2. Soil profile evaluations used to determine or identify soil horizon depths, soil color, soil texture, redoximorphic feature colors or depth to groundwater or bedrock shall be conducted using either soil pits or soil borings.

(d) Depth. Soil profile evaluations shall extend an adequate depth below the land surface to identify soil properties critical to soil treatment or dispersal of wastewater, treated wastewater, final effluent or nonwater-carried human waste.

(3) EXCAVATION METHODS. (a) Soil profile excavations. A soil profile excavation shall be of such size and construction to allow accurate determination of soil characteristics.

(b) Soil borings. 1. Soil borings shall be created by means of a soil bucket auger, soil probe, split-spoon sampler or Shelby tube having at least a 2 inch diameter.

2. A soil boring may not be created by means of a power auger.

(c) Soil pits. A soil pit shall be of adequate size, depth and construction to enable a person to safely enter and exit the pit and to complete a morphological soil profile description.

Note: Occupational Safety and Health Administration rules and regulations (29 CFR 1926, Subpart P) apply to certain types of excavations, and the persons entering such excavations need to be familiar with those regulations.

(4) SOIL EVALUATION CONDITIONS. (a) Soil color evaluations shall be performed on days when light conditions permit accurate color determinations.

(b) Frozen soil material shall be thawed prior to conducting evaluations for soil color, texture, structure and consistence.

Comm 85.30 SOIL PROFILE DESCRIPTION AND INTERPRETATIONS. (1) GENERAL. (a) A soil profile description shall be prepared for each soil profile excavation constructed.

(b) Soil profile descriptions shall be written in accordance with the descriptive procedures, terminology and interpretations found in Chapter 3 of the Soil Survey Manual, USDA, October, 1993, except where modified by, or in conflict with, this chapter.

(c) A soil profile description to substantiate soil application rates shall include at least all of the following morphological information for each soil horizon or layer:

1. Thickness in inches or decimal feet.

2. Munsell soil color notation.

3. Soil mottle or redoximorphic feature color, abundance, size and contrast.

4. United States Department of Agriculture, USDA, soil textural class with rock fragment modifiers.

5. Soil structure grade, size and shape.

6. Soil consistence.

7. Root abundance and size.

8. Soil boundary.

9. Occurrence of saturated soil, groundwater, bedrock or disturbed soil.

(d) A soil profile description to substantiate soil characteristics other than for application rates shall include the information specified in par. (c) 1. to 4. and 9.

(2) SOIL INTERPRETATIONS. (a) Redoximorphic features or mottles shall be interpreted as zones of seasonal or periodic soil saturation or groundwater, except as provided under sub. (3).

(b) Unless determined otherwise under s. Comm 85.60, the highest elevation of seasonal soil saturation shall be the ground surface where redoximorphic features are present within 4 inches of the bottom of the A horizon.

(3) SOIL COLOR PATTERN EXEMPTIONS. (a) Without filing a report under s. Comm 85.60 (2), a certified soil tester may discount the following conditions, not limited by enumeration, as indicators of seasonally saturated soil:

1. Fossilized soil color patterns formed by historic periodic soil saturation.

2. A soil profile that has an abrupt textural change, consisting of silt loam or finer textures overlying at least 4 feet of unsaturated loamy sand or coarser textured soil and 24 inches or less of periodically saturated soil immediately above the coarser material.

3. Redoximorphic features orientated along old or decayed root channels.

4. Residual sandstone colors.

5. Unevenly weathered glacially deposited material, glacially deposited material naturally gray in color, or concretionary material in various stages of decomposition.

6. Deposits of lime.

7. Light colored silt or fine sand coatings on soil ped surfaces.

(b) Without filing a report under s. Comm 85.60 (2) for a specific site, the department may accept the results of soil saturation determinations or of the hydrograph procedure under s. Comm 85.60 previously conducted for areas adjacent to the site, provided that the soil profile descriptions and interpretations confirms that the soil and site conditions are similar for the specific site and the adjacent areas.

(4) SOIL COLOR PATTERN REPORTS. The certified soil tester shall report and describe any soil color pattern exemptions encountered.

(5) DETERMINATION REQUESTS. A certified soil tester may request a determination by the governmental unit or department staff on the significance of unusual soil color patterns as indicators of soil saturation that may not indicate saturated soil conditions that will interfere with wastewater treatment. The governmental unit or department may decline to make such determinations, and defer to the use of soil saturation determinations pursuant to s. Comm 85.60 or some other method to make a determination.

Comm 85.40 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: Soil evaluation report forms in an acceptable format are available from the Safety and Buildings Division, P.O. Box 7162, Madison, WI 53707-7162.

(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.

(3) REPORT CONTENTS. (a) Site report. A site evaluation report shall include at least all of the following:

1. The site's legal description to within 40 acres.

2. The date the data was collected.

3. A legible and permanent site plan that:

a. Is presented on paper no smaller than 8 ½ inches by 11 inches in size;

b. Is drawn to scale or fully dimensioned;

c. Shows the extent of the site evaluated for soil dispersal or treatment;

4. Location information for all points under investigation including structures, property lines and other encumbrances to the treatment or dispersal component placement on the site.

5. Pertinent elevation data, such as:

a. A reference to, and description of, a permanent vertical and horizontal reference point or bench mark from which all distances and elevations are delineated on the site plan;

b. The natural, undisturbed surface grade elevation for all soil profile excavations;

c. The percent and direction of land slope for the site under evaluation;

d. Ground surface contour lines at an interval appropriate for the conditions present;

e. The floodplain elevation, if established, and current surface elevation of any adjacent navigable waters or reservoir; and

f. The existing grade adjacent to the groundwater elevation observation pipe, the top of the observation pipe, and the bottom of the observation pipe.

(b) Soil report. A soil evaluation report shall include at least all of the following:

1. A site evaluation report pursuant to par. (a).

2. The date soil evaluations were conducted.

3. The site's legal description to within 40 acres.

4. Soil profile descriptions pursuant to s. Comm 85.30 for all soil profile evaluation excavations.

Comm 85.50 GOVERNMENTAL UNIT REVIEW. (1) GENERAL. (a) A governmental unit shall review all soil evaluation reports and site evaluation reports within 6 months of receipt.

(b) Upon completing the review of a soil evaluation report a governmental unit shall accept the report, reject the report, request additional information or clarification, or require verification under sub. (2).

(c) When a report is deemed acceptable, a governmental unit shall so indicate on the report and file the report for future reference.

(d) If the report is not acceptable, a governmental unit shall notify the submitter in writing and shall state the deficiencies or actions, or both, necessary to bring the report into compliance with this chapter or ch. Comm 83.

(2) VERIFICATION. (a) Soil. 1. The governmental unit or the department may require the property owner or the certified soil tester to provide soil pits in accordance with s. Comm 85.20 (3) for verification of soil profile evaluation data.

2. The certified soil tester who is responsible for the soil report shall be present at the site during the verification of soil profile evaluation data if so requested by the governmental unit or the department.

3. Soil verifications may not be conducted under adverse weather or light conditions that may lead to inaccurate results.

(b) Site. 1. The governmental unit or the department may require the property owner or certified individual who prepared the site report to provide assistance and equipment to verify site conditions.

2. The certified individual who is responsible for the site report shall be present at the site during the verification of site conditions if so requested by the governmental unit or department.

(c) Report. The governmental unit or the department shall complete a written report for each soil or site verification completed, and the results or findings of the report shall be filed with the soil and site evaluation report for future reference.

Comm 85.60 SOIL SATURATION DETERMINATIONS. (1) GENERAL. (a) Optional documentation. 1. A property owner, or their agent, may submit documentation to the department 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.

2. Documentation shall be in the form of an interpretative determination, soil saturation determination, or hydrograph procedure pursuant to this section.

(b) Artificially controlled navigable waters. If the groundwater elevation at a site is influenced by the artificial control of navigable waters by a recognized management entity, all of the following conditions shall be addressed:

1. If loamy sand or coarser soil textures prevail at a site, the groundwater elevation at the site shall be compared to the current and highest controlled navigable water elevation.

2. The highest normal groundwater elevation at such sites shall be the higher of either the observed elevation or an adjusted elevation based on the controlled water.

(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 current conditions of periodic soil saturation.

(b) 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 not limited, to all of the following information:

1. A soil evaluation report pursuant to s. Comm 85.40.

2. An interpretive review of the site including, but not limited, to all of the following:

a. Local hydrology.

b. An 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.

(3) SOIL SATURATION DETERMINATION. (a) Actual elevations of soil saturation may be determined at specific sites in accordance with the soil saturation determination procedures in pars. (b) to (c).

(b) Intent to determine soil saturation. 1. The property owner, or his or her agent, shall notify the governmental unit and the department of the intent to conduct a soil saturation determination at least 15 business days prior to installing any groundwater elevation observation pipe.

2. The notification to conduct a soil saturation determination shall include:

a. Soil profile descriptions pursuant to s. Comm 85.30 in the area under investigation and the proposed number, depth, and location of the observation pipes; and

b. Written permission signed by the property owner for governmental unit and department personnel to enter upon the property under investigation during reasonable hours of the day to verify observation pipe installation or soil saturation determination results.

(c) Precipitation. 1. Precipitation data reported for soil saturation determination purposes shall include monthly totals for September through May, and daily totals for February through May.

2. Precipitation data totals under subd. 1. shall be from either the closest local station to the site where the observation pipe is installed, or the average from the 3 closest local stations to the site. If averaging is used, the totals under subd. 1. shall be submitted for all 3 stations.

(d) Regional water tables. 1. Where sites are subject to a broad, relatively uniform, regional water table, the fluctuation observed over a several year cycle shall be considered.

2. At such sites, and where free water levels are more than 5 feet below grade, determinations shall be made using the hydrograph procedures contained in sub. (4).

3. Areas affected by a regional water table shall be delineated by the department in consultation with the affected counties and the Wisconsin Geological and Natural History Survey.

(e) Fine textured soil. 1. The department may prohibit soil saturation determinations in fine textured soil with high matric potentials where determination results may be inconclusive.

2. In such cases, the department may approve alternative methods to address the direct determination of saturated or near saturated soil conditions not enumerated in this section.

(f) Groundwater elevation observation pipe installation and construction. 1. 'Number of observation pipes'. a. At least 3 groundwater elevation observation pipes shall be installed to delineate the area under investigation.

b. The governmental unit or department may require more than 3 observation pipes to adequately evaluate potential soil saturation conditions.

2. 'Observation pipe depth'. a. At the request of the department or governmental unit, at least one observation pipe shall be constructed to a depth of 15 feet below the ground surface to determine if high groundwater elevation conditions are due to a perched water table and the possible extent of the saturated zone.

b. Other observation pipes shall terminate at specific depths below grade that will serve to evaluate where shallow perched zones of soil saturation occurring within the soil profile.

c. The governmental unit or department may designate specific observation pipe depths and locations based on soil and site conditions, or experience in a particular geographic area or topographic position.

d. An observation pipe may not be less than 24 inches deep.

3. 'Observation pipe construction'. The direct observation of soil saturation conditions shall be accomplished by means of observation pipes conforming to this subdivision and Figure 85.60-1.

a. The observation pipe shall be of a material meeting the standards in s. Comm 84.30 Table 84.30-1, except that lead pipe may not be used.

b. The inside diameter of an observation pipe may not be less than 2 inches or more than 4 inches nominal size.

c. The borehole diameter shall be 2 to 4 inches larger than the outside diameter of the observation pipe.

d. The top of the observation pipe shall terminate at least 18 inches above grade and be provided with a vented cap.

e. The bottom of the observation pipe shall terminate with a slotted, or screened pipe. The slots or screen shall extend 6 to 18 inches above the bottom of the pipe and be at least 4 inches below the filter pack seal. The slots or screen shall not be hand cut and shall be designed to retain soil particles with a diameter of greater than 0.02 inch.

f. Except for the vented end cap, joints between lengths of pipe and fittings shall conform to s. Comm 84.40.

g. Finished grade around the observation pipe shall be sloped away from the observation pipe using soil material.

h. At a minimum, the upper 12 inches of annular space surrounding the observation pipe shall be sealed by puddled clay, bentonite, or an equal-parts mixture of soil, bentonite and cement. A surface seal may not be necessary if the entire soil profile is sand.

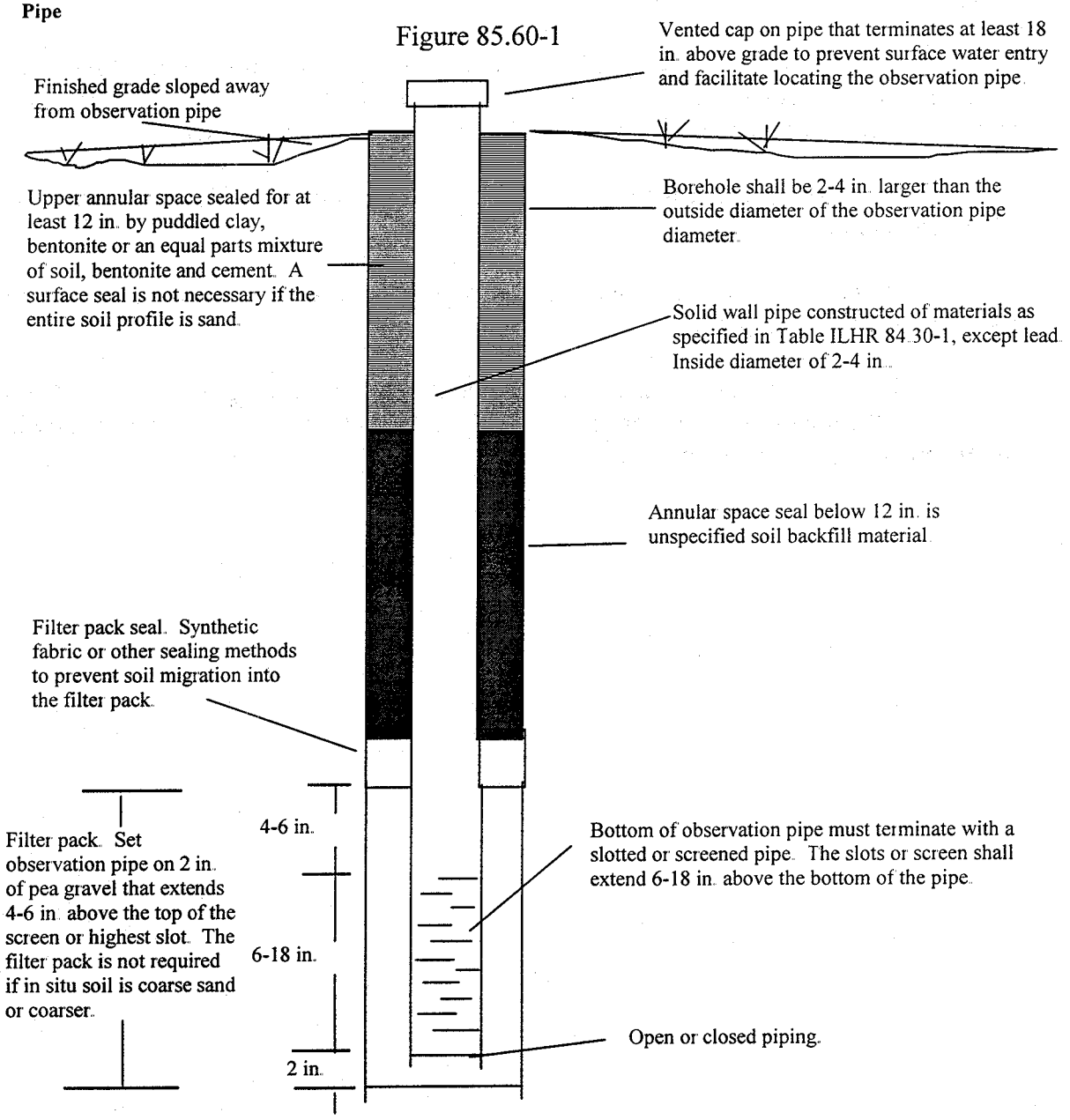
i. The annular space seal below 12 inches and to the top of the filter pack seal may be of unspecified soil material.

j. A filter pack seal shall be installed above the filter pack to prevent soil migration downward into the filter pack.

k. The observation pipe shall be set on at least 2 inches of pea gravel that extends 4 to 6 inches above the top of the screen or highest slot. The gravel filter pack is not necessary if the natural soil is coarse sand or coarser.

Groundwater Elevation Observation Pipe

Figure 85.60-1



(g) Observations. 1. 'Observation period.' The observation period for soil saturation determinations shall begin on or before the appropriate date specified in Figure 85.60-2, and end June 1st.

2. 'Alternate observation period.' The department may approve an alternate observation period if the data presented conclusively demonstrates equivalency to conditions encountered during a normal spring observation period.

3. 'Minimum frequency.' Observations shall be made on the first day of the observation period and at least every 7 days thereafter until the observation period is complete.

(h) Conclusions. 1. The highest level of soil saturation shall be considered to occur at the highest elevation of free water present in an observation pipe during a 7-day observation period.

2. The results of soil saturation determinations under this section shall be considered inconclusive if the precipitation totals under par. (b) do not equal or exceed:

a. 8.5 inches from September 1st through the last day of February; and

b. 7.6 inches from March 1st through May 31st.

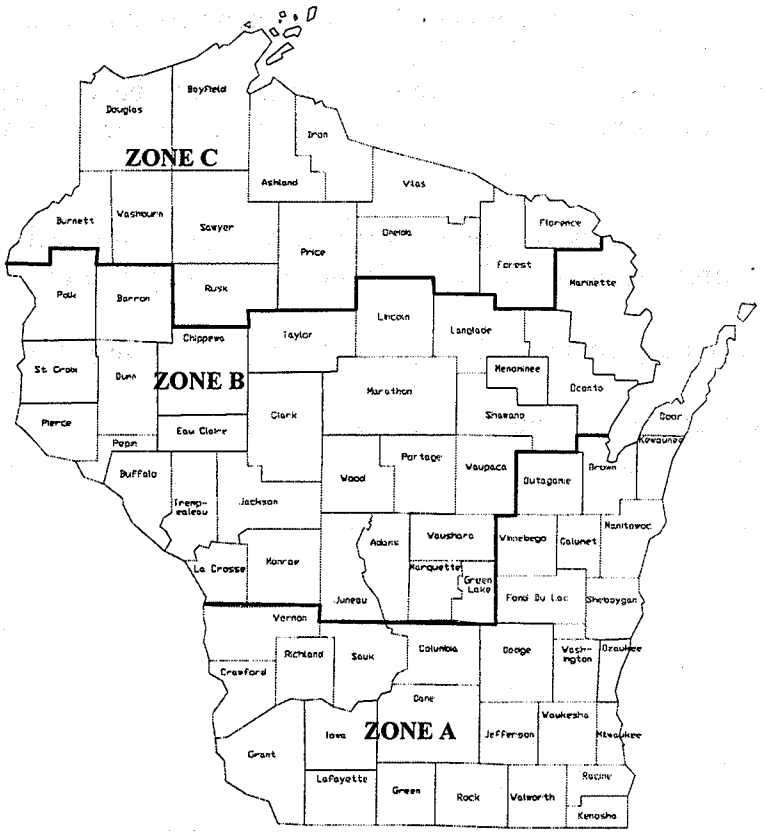


Figure 85.60-2
Latest Date to Begin Spring Soil Saturation Monitoring

Zone A	February 15
Zone B	March 1
Zone C	March 15

(i) Reporting data. 1. Within 60 days of the completion of the observations, 3 copies of the following data shall be submitted to the department for review:

a. A soil and site evaluation report pursuant to s. Comm 85.40.

b. Observation pipe installation, depth, location and elevation information.

c. Precipitation data and name of any local station used.

d. Observation dates.

e. Current and any prior observation results.

f. Any governmental unit observations or reports pertaining to the soil saturation determination observations, observation pipe construction or soil/site conditions.

2. Within 60 days of the completion of the observations, one copy of the data specified in subd. 1. shall be filed with the governmental unit having jurisdiction.

(j) Report forms. Soil saturation determination results shall be reported on forms specified by the department.

Note: Soil saturation determination report forms in an acceptable format are available from the Safety and Buildings Division, P.O. Box 7162, Madison, WI 53707-7162.

(k) Failure to report. Failure to file soil saturation determination results with the governmental unit and department within 60 days may disqualify the site from future soil saturation or interpretive determinations.

(4) HYDROGRAPH PROCEDURE. (a) 1. Where regional water table fluctuations are considered in deep sandy soil, the predicted high groundwater elevation shall be established using hydrograph documentation.

2. The highest groundwater elevation shall be determined by direct observation during the soil profile evaluation or by one of the hydrograph methods outlined in pars. (b) to (d), whichever is highest.

(b) 1. If there is less than 5 feet to free water below original grade, the procedures detailed in sub. (2) or (3) shall be used to determine the highest predicted groundwater elevation at the site.

2. If there is 5 feet or more to free water below original grade, the hydrograph procedure may be used to determine the highest predicted groundwater elevation at the site.

(c) Where the water table at the site is 5 to 10 feet below grade, the procedures of subds. 1. to 5. shall be followed:

1. A completed soil and site evaluation report pursuant to s. Comm 85.40 that confirms the elevation of free water, if observed, shall be prepared.

2. a. A slotted or screened groundwater elevation observation pipe shall be installed at the proposed system location to a depth of at least 12 inches below the free water elevation.

b. The observation pipe shall be installed and tested pursuant to sub. (3) (e) 5.

3. a. The water level in the observation pipe shall be recorded after completion of the observation pipe installation and 7 days later.

b. The highest of the 2 water levels shall be used to complete the hydrograph procedure.

4. The permanent USGS groundwater elevation well or wells as assigned by the governmental unit or department shall be read within 24 hours of establishing the actual free water elevation at the site.

Note: Soil evaluation report forms in an acceptable format are available from the Safety and Buildings Division, P.O. Box 7162, Madison, WI 53707-7162.

5. The hydrograph procedure shall be completed and the results shall be reported to the department in a format specified by the department.

(d) Where the water table at the site is 10 feet or greater below grade, the procedures of subds. 1. to 3. shall be followed.

1. A completed soil and site evaluation report pursuant to s. Comm 85.40 that confirms the elevation of free water, if observed, shall be prepared.

2. The permanent USGS groundwater elevation well or wells assigned to the project by the governmental unit or department shall be read within 24 hours of the actual free water determination at the site.

3. The standard hydrograph procedure shall be completed and the results shall be reported to the department in a format specified by the department.

Note: Hydrograph soil saturation report forms in an acceptable format are available from the Safety and Buildings Division, P.O. Box 7162, Madison, WI 53707-7162.

(5) SOIL SATURATION OBSERVATION PIPE REMOVAL. The following requirements shall apply to all groundwater elevation observation pipes installed pursuant to this section:

(a) Removal timeline. Unless specifically approved by the governmental unit or department, all groundwater elevation observation pipes shall be removed within 60 days after the completion of soil saturation determination.

(b) Contamination conduit. Any groundwater elevation observation pipe found by the department or governmental unit to be acting as a conduit for groundwater contamination shall be ordered removed immediately.

(6) VERIFICATION. (a) Verification. 1. The governmental unit or department may request verification of soil saturation determinations pursuant to s. Comm 85.50 (2), and proper observation pipe installation pursuant to this section.

2. The governmental unit or the department may require any groundwater elevation observation pipe deemed by the governmental unit or the department to be in poor contact with the surrounding soil to be reinstalled pursuant to this section.

(b) On-site visits. 1. The governmental unit or department may visit sites during soil saturation determination periods or at other reasonable times to determine the accuracy of data.

2. A written record of on-site visits in subd. 1. shall be maintained by the agency conducting the visits.

SECTION 71. Chapter Comm 91 is created to read:

Chapter Comm 91

SANITATION

Comm 91.01 PURPOSE. The purpose of this chapter is to establish minimum standards and criteria for the design, installation and maintenance of sanitation systems and devices which are alternatives to water-carried waste plumbing fixtures and drain systems so that these sanitation systems and devices are safe and will safeguard public health and the waters of the state.

Note: Local governmental units may restrict or place more stringent limitations or requirements relative to the design, installation, maintenance or use of the sanitation systems within the scope of this chapter.

Comm 91.02 SCOPE. (1) This chapter applies to all composting toilet systems, incinerating toilets, pit privies and vault privies installed or constructed on or after the effective date of this chapter.

(2) The provisions of this chapter are not retroactively applied to existing installations unless specifically stated in the administrative rule.

Comm 91.03 DEFINITIONS. In this chapter:

(1) "Composting toilet system" means a method that collects, stores and converts by bacterial digestion nonliquid-carried human wastes or organic kitchen wastes, or both, into humus.

(2) "Department" means the department of commerce.

(3) "Incinerating toilet" means a self-contained device for the treatment of nonliquid carried wastes that deposits the wastes directly into a combustion chamber, reduces the solid portion to ash and evaporates the liquid portion.

(4) "Pit privy" means an enclosed nonportable toilet into which nonwater-carried human wastes are deposited to a subsurface storage chamber that is not watertight.

(5) "Portable restroom" means a self-contained portable unit that includes fixtures, incorporating holding tank facilities, designed to receive human excrement.

(6) "Vault privy" means an enclosed nonportable toilet into which nonwater-carried human wastes are deposited to a subsurface storage chamber that is watertight.

Comm 91.10 COMPOSTING TOILET SYSTEMS. (1) The materials, design, construction and performance of a composting toilet system shall conform to NSF Standard 41.

(2) All composting toilet systems shall be listed by a testing agency acceptable to the department.

Note: Listing agencies acceptable to the department include the American Gas Association; Canadian Standards Association; NSF International; Underwriter's Laboratories; and Warnock Hersey.

(3) (a) Components for the storage or treatment of wastes shall be continuously ventilated.

(b) Ventilation ducts or vents for the composting toilet system shall conform to s. Comm 82.31 (16).

Note: See appendix for a reprint of portions of s. Comm 82.31 (16).

(4) (a) The disposal of the compost shall be in accordance with EPA part 503.

(b) The disposal of any liquid from a composting toilet system shall be either to a public sanitary sewer system or a POWTS conforming to ch. Comm 83.

Comm 91.11 INCINERATING TOILETS. (1) The design, construction and installation of a gas-fired incinerating toilet shall conform to ANSI Z21.61.

(2) The materials, design, construction and performance of an electric-fired incinerating toilet shall conform to NSF Standard 41.

(3) All electric and gas-fired incinerating toilets shall be listed by a testing agency acceptable to the department.

Note: Listing agencies acceptable to the department include the American Gas Association, Canadian Standards Association, NSF International, Underwriter's Laboratories, and Warnock. Hersey

(4) (a) The disposal of the end product shall be of in accordance with 40 CFR Part 503, Standards for the Use or Disposal of Sewage Sludge.

Note: EPA materials relating to EPA 503, including, "Domestic Septage Regulatory Guidance: A Guide to the EPA 503 Rule", are available from the Office of Water Resource, US EPA, 401 M Street SW, Washington D.C. 20460.

(b) The disposal of any liquid from an incinerating toilet shall be either to a public sanitary sewer system or a POWTS conforming to ch. Comm 83.

Comm 91.12 PRIVIES. (1) (a) The storage chamber of a vault privy shall conform with the requirements of s. Comm 84.25 relating to holding tanks, and shall have a minimum storage capacity of 200 gallons or one cubic yard.

(b) 1. The storage chamber of a pit privy shall be sited and located in soil recognized to provide treatment and dispersal in accordance with s. Comm 83.44 (4) (b).

Note: Chapter Comm 85 establishes procedures for conducting soil evaluations and preparing soil evaluation reports. Section Comm 5.33 delineates the qualifications and certification procedures for individuals who conduct soil evaluations.

2. Governmental units may set standards for the structure above the vault or pit for one- and two-family dwellings.

3. Privies for public use shall meet the requirements of this section and s. Comm 52.63.

Note: Chapters NR 811 and 812 establish minimum separation distances between a pit or vault privy and a potable well. Chapters NR 811 and 812 are administered by the department of natural resources.

(c) The storage chamber of a vault privy shall be anchored to prevent flotation caused by saturated soil conditions.

(2) (a) The storage chamber of a pit or vault privy shall be provided with a vent for the purpose of relieving explosive gases.

(b) The vent serving the storage chamber of a privy shall be:

1. At least 3 inches in diameter;

2. Installed in accordance with s. Comm 82.31 (16) (a) to (f); and

3. Fabricated or provided with screening to prevent insects from entering the storage chamber.

(3) The servicing of a vault privy relative to the pumping, transporting and disposal of the contents shall be in accordance with ch. NR 113.

(4) The abandonment of a vault privy shall be accomplished by:

(a) Having the contents of the storage chamber pumped and disposed of in accordance with ch. NR 113;

(b) Removing the entire top of the chamber; and

(c) Filling the remaining portion of the emptied storage chamber with soil or other inert material to an elevation equal to or above the surrounding grade.

(5) The abandonment of a pit privy shall be accomplished by filling the storage chamber with soil or other inert material to an elevation equal to the surrounding grade.

Note: The requirements of the commercial building code, chs. Comm 50-64, apply to the structures built over those privies serving public buildings and places of employment.

(6) (a) A privy may not be installed in a floodway.

(b) A privy may be installed in the floodfringe provided that the area is filled to remove it from the floodfringe designation or the vault is flood-proofed.

Note: The department of natural resources determines if filling or flood-proofing is in accordance with current rules in effect for development in a floodfringe area.

Comm 91.13 PORTABLE RESTROOMS. (1) The storage chamber of a portable restroom into which human waste is to be deposited shall be watertight.

(2) The entire floor and the side walls to a height of not less than 4 inches of a portable restroom shall be of a material impervious to water.

Comm 91.20 INCORPORATION OF STANDARDS BY REFERENCE. (1) CONSENT. Pursuant to s. 227.21, Stats., the attorney general and the revisor of statutes have consented to the incorporation by reference of the standards listed in sub. (4).

(2) COPIES. Copies of the adopted standards are on file in the offices of the department, the secretary of state and the revisor of statutes. Copies of the standards may be purchased through the respective organizations listed in sub. (3).

(3) ADOPTION OF STANDARDS. The standards referenced in pars. (a) and (b) are hereby incorporated by reference into this chapter.

(a) American National Standards Institute, Inc., 1430 Broadway, New York, New York 10018, GAS-FIRED TOILETS, Z21.61-1983.

(b) NSF International, 3475 Plymouth Road, P.O. Box 130140, Ann Arbor, Michigan 48113-0140, NON-LIQUID SATURATED TREATMENT SYSTEMS, NSF 41-1998.

Chapter Comm 91
Appendix

The material and information contained in this appendix is for clarification purposes only. Appendix material and information are numbered to correspond to the rule number as it appears in the text of the code. Material and information included in this appendix is subject to change without notice, including names, addresses, phone numbers and forms, and reflects information known at the time of publication.

A-91.10 (3) (b) Section Comm 82.31 (16) (a) to (f) reads as follows:

82.31 (16) VENT TERMINALS. All vents and vent systems shall terminate in the open air in accordance with this subsection.

(a) Extension above roofs. Extensions of vents through a roof shall terminate at least 8 inches above the roof. Where the roof is to be used for any purpose other than weather protection, the vents shall extend at least 7 feet above the roof.

(b) Waterproof flashings. The penetration of a roof system by a vent shall be made watertight with an approved flashing.

(c) Prohibited uses. Vent terminals shall not be used as flag poles, support for antennas or other similar purposes.

(d) Location of vent terminals. 1. A vent shall not terminate under the overhang of a building.

2. All vent terminals shall be located:

a. At least 10 feet from an air intake;

b. At least 5 feet from a power exhaust vent;

c. At least 10 feet horizontally from or 2 feet above roof scuttles, doors and openable windows; and

d. At least 5 feet from or 2 inches above parapet walls.

3. Where a structure has an earth covered roof extending from surrounding grade, the vent extension shall run at least 7 feet above grade and terminate with an approved vent cap. The portion of vent pipe outside the structure shall be without joints, except one fitting may be installed where the pipe leaves the top or side of the structure.

(e) Extension through wall. Where approved by the department, a vent may terminate through an exterior wall. Such a vent shall terminate at least 10 feet horizontally from any lot line and shall terminate downward. The vent shall be screened and shall comply with par. (d).

(f) Extensions outside buildings. Drain or vent pipe extensions shall not be located or placed on the outside of an exterior wall of any new building, but shall be located inside the building.

(END)

* *

EFFECTIVE DATE

Pursuant to s. 227.22 (2) (b), Stats., these rules shall take effect on the first day of the third month following publication in the Wisconsin Administrative Register.

* *