



VIRTUAL/TELECONFERENCE
WISCONSIN ADVISORY COUNCIL ON BUILDING SUSTAINABILITY
Virtual, 4822 Madison Yards Way, Madison
Contact: Brad Wojciechowski (608) 266-2112
April 10, 2026

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

AGENDA

9:00 A.M.

OPEN SESSION – CALL TO ORDER – ROLL CALL

- A. Adoption of Agenda (1-2)**
- B. Approval of Minutes of December 5, 2025 (3)**
- C. Reminders: Conflicts of Interest, Scheduling Concerns**
- D. Introductions, Announcements and Recognition**
 - 1. Recognition: Benjamin Austin, Committee Member (Resigned 12/4/2025)
 - 2. Recognition: Keith A. Swartz, Committee Member (Resigned 3/2/2026)
- E. Administrative Matters – Discussion and Consideration (4-8)**
 - 1. Department, Staff and Council Updates
 - 2. **2026 Meeting Dates (4)**
 - 3. **Annual Policy Review (5-7)**
 - 4. **Election of Officers (8)**
 - 5. Council Members
 - a. Eber, Alan H.
 - b. Hackel, Scott P.
 - c. Herrmann, Monika S.
 - d. Nergard, Missy A.
 - e. Nino Torres, Victor G.
 - f. O'Brien, Timothy M.
 - g. Weber, Christina L.
- F. Administrative Rule Matters – Discussion and Consideration (9-82)**
 - 1. CR 26-016: SPS 316 relating to the Electrical Code **(10-27)**
 - 2. CR 26-019: SPS 381-387 relating to the Plumbing Code **(28-81)**
- G. WACBS Future Goals – Discussion and Consideration**
 - 1. Healthy Buildings

H. Legislation and Policy Matters – Discussion and Consideration

I. Discussion and Consideration of Items Added After Preparation of Agenda:

1. Introductions, Announcements and Recognition
2. Administrative Matters
3. Election of Officers
4. Education and Examination Matters
5. Credentialing Matters
6. Legislative and Policy Matters
7. Administrative Rule Matters
8. Council Liaison Training and Appointment of Mentors
9. Informational Items

J. Public Comments

K. ADJOURNMENT

NEXT MEETING: SEPTEMBER 23, 2026

MEETINGS AND HEARINGS ARE OPEN TO THE PUBLIC, AND MAY BE CANCELLED WITHOUT NOTICE.

Times listed for meeting items are approximate and depend on the length of discussion and voting. All meetings are held virtually unless otherwise indicated. In-person meetings are typically conducted at 4822 Madison Yards Way, Madison, Wisconsin, unless an alternative location is listed on the meeting notice. In order to confirm a meeting or to request a complete copy of the board’s agenda, please visit the Department website at <https://dsps.wi.gov>. The board may also consider materials or items filed after the transmission of this notice. Times listed for the commencement of any agenda item may be changed by the board for the convenience of the parties. The person credentialed by the board has the right to demand that the meeting at which final action may be taken against the credential be held in open session. Requests for interpreters for the hard of hearing, or other accommodations, are considered upon request by contacting the Affirmative Action Officer or reach the Meeting Staff by calling 608-267-7213.

**VIRTUAL/TELECONFERENCE
WISCONSIN ADVISORY COUNCIL ON
BUILDING SUSTAINABILITY
MEETING MINUTES
DECEMBER 5, 2025**

PRESENT: Alan Eber, Scott Hackel (*arrived at 9:02 a.m.*), Monika Herrmann, Missy Nergard, Victor Nino Torres, Keith Swartz, Christi Weber

ABSENT: Timothy O'Brien

STAFF: Brad Wojciechowski, Executive Director; Joseph Ricker, Legal Counsel; Jacob Pelegrin, Rules Administrative Coordinator; Ashley Sarnosky, Board Administration Specialist; and other DSPS Staff

CALL TO ORDER

Missy Nergard, Chairperson, called the meeting to order at 9:00 a.m. A quorum of six (6) members was confirmed.

Scott Hackel arrived at 9:02 a.m.

ADOPTION OF AGENDA

MOTION: Alan Eber moved, seconded by Christi Weber, to adopt the Agenda as published. Motion carried unanimously.

APPROVAL OF MINUTES OF JUNE 6, 2025

MOTION: Scott Hackel moved, seconded by Keith Swartz, to adopt the Minutes of June 6, 2025, as published. Motion carried unanimously.

INTRODUCTIONS, ANNOUNCEMENTS, AND RECOGNITION

RECOGNITIONS

Recognition: Francisco Sayu – Council Member (Resigned: 8/18/2025, Member since 8/11/2022)

MOTION: Victor Nino moved, seconded by Christi Weber, to recognize and thank Francisco Sayu for their years of dedicated service to the Council and State of Wisconsin. Motion carried unanimously.

ADJOURNMENT

MOTION: Victor Nino moved, seconded by Christi Weber, to adjourn the meeting. Motion carried unanimously.

The meeting adjourned at 10:07 a.m.

**WISCONSIN COUNCIL ON BUILDING SUSTANABILITY
2026 MEETING DATES**

Meeting Date	Start time	Location	Agenda Item Deadline
Wednesday, March 11, 2026	9:30 AM	Virtual	2/27/2026
Friday, April 10, 2026	9:00 AM	Virtual	3/31/2026
Wednesday, September 23, 2026	9:00 AM	Virtual	9/11/2026

**State of Wisconsin
Department of Safety & Professional Services**

AGENDA REQUEST FORM

- 1) Name and title of person submitting the request: Audra Cohen-Plata, DPD Division Administrator
 - 2) Date When Request Submitted: 12/11/2025
 - 3) Name of Board, Committee, Council, Section: **All Boards**
 - 4) Meeting Date: **First Meeting of 2026**
-

- 5) Attachments: **Yes**
 - 6) How should the item be titled on the agenda page? **Administrative Matters: Annual Policy Review**
 - 7) Place Item in: **Open Session**
 - 8) Is an appearance before the Board being scheduled? No
 - 9) Name of Case Advisor(s), if applicable: N/A
-

10) Describe the issue and action that should be addressed:

Please be advised of the following policy item attachments:

- 1) 2026 Annual Policy Review Memo
- 2) Timeline of a Meeting
- 3) Sample Per Diem Report



DATE: January 1, 2026
TO: DSPS Board, Council, and Committee Members
FROM: Division of Policy Development
SUBJECT: 2026 Administrative Policy Reminders

Please be advised of the following policy items:

1. In-Person and Virtual Meetings: Depending on the frequency of scheduled meetings, discussion topics, and member availability, DSPS may host one or more in-person meetings. Virtual connection options are available for all board meetings. If you are traveling internationally, please see item 9 below.
2. Attendance/Quorum: Thank you for your service and commitment to meeting attendance. If you cannot attend a meeting or have scheduling conflicts impacting your attendance, please let us know as soon as possible. A quorum is required for Boards, Sections, and Councils to meet pursuant to Open Meetings Law. Connect to / arrive at meetings 10 minutes before posted start time to allow for audio/connection testing, and timely Call to Order and Roll Call. Virtual meetings include viewable onscreen materials and A/V (speaker/microphone/video) connections.
3. Walking Quorum: Board/Section/Council members must not collectively discuss the body's business outside a properly noticed meeting. If several members of a body do so, they could be violating the open meetings law.
4. Mandatory Training: All Board Members must complete Public Records and Ethics Training, annually. [Register to set up an account](#) in the Cornerstone LearnCenter online portal or [Log in](#) to an existing account.
5. Agenda Deadlines: Please communicate agenda topics to your Executive Director before the agenda submission deadline at 12:00 p.m., eight business days before a meeting. (Attachment: Timeline of a Meeting)
6. Travel Voucher and Per Diem Submissions: Please submit all Per Diem and Reimbursement claims to DSPS within 30 days of the close of each month in which expenses are incurred. (Attachment: Per Diem Form) Travel Vouchers are distributed on travel approval.
7. Lodging Accommodations/Hotel Cancellation Policy: Lodging accommodations are available to eligible members for in-person meetings. Standard eligibility: the member must leave home before 6:00 a.m. to attend an in-person meeting by the scheduled start time.
 - a. If a member cannot attend a meeting, they must cancel their reservation with the hotel within the applicable cancellation timeframe.
 - b. If a meeting is changed to occur remotely, is canceled, or rescheduled, DSPS staff will cancel or modify reservations as appropriate.
8. Inclement Weather Policy: In inclement weather, the DSPS may change a meeting from an in-person venue to a virtual/teleconference only.
9. International Travel: Use of State-managed IT resources and access of State data outside the United States are strictly prohibited, as they cause an unacceptable level of cybersecurity risk. This prohibition includes all State-provided or State-managed IT resources housed on personal devices. Please advise your Executive Director of any planned international travel commitments that may coincide with board meetings or other board business in advance of your departure.

Timeline of a Meeting

At least 2 weeks (10 business days) prior to the meeting

Submit Agenda Item suggestions to the Board's Executive Director. Include background materials. Copyright-protected materials must be accompanied by written permission from the publisher to share documents.

8 business days prior to the meeting

The Agenda is drafted. (All agenda materials are due to the Department by 12:00 p.m.)

7 business days prior to the meeting

The draft agenda is submitted to the Executive Director; the Executive Director transmits it to the Chair for review and approval.

5 business days prior to the meeting

The approved agenda is returned to the Board Administration Specialist (BA) for agenda packet production and compilation.

4 business days prior to the meeting

Agenda packets are posted on the DSPS Board SharePoint site and on the Board webpage.

Agenda Item Examples:

- Open Session Items
 - Public Hearings and Administrative Rules Matters
 - Administrative Matters
 - Legislation and Policy Matters
 - Credentialing Matters
 - Education and Exam Issues
 - Public Agenda Requests
 - Current Issues Affecting the Profession
- Closed Session items
 - Deliberations on Proposed Disciplinary Actions
 - Monitoring Matters
 - Professional Assistance Procedure (PAP) Issues
 - Proposed Final Decisions and Orders
 - Orders Fixing Costs/Matters Relating to Costs
 - Credentialing Matters
 - Education and Exam Issues

Thursday of the Week Prior to the Meeting

Agendas are published for public notice on the Wisconsin Public Notices and Meeting Minutes website: publicmeetings.wi.gov.

1 business day after the Meeting

"Action" lists are distributed to Department staff detailing board actions on closed session business.

5 business days after the Meeting


"To Do" lists are distributed to staff to ensure that board open session decisions are acted on and/or implemented within the appropriate divisions in the Department. Minutes approved by the board are published on the Wisconsin Public Notices and Meeting Minutes website: publicmeetings.wi.gov.

**WISCONSIN ADVISORY COUNCIL
ON BUILDING SUSTAINABILITY
2025 OFFICERS**

2025 OFFICERS	
Chairperson	Missy Nergard
Vice Chairperson	Timothy O'Brien
Secretary	Christina Louise Weber

**State of Wisconsin
Department of Safety & Professional Services**

AGENDA REQUEST FORM

1) Name and title of person submitting the request: Brad Wojciechowski, Executive Director		2) Date when request submitted: 3/2/2026 <small>Items will be considered late if submitted after 12:00 p.m. on the deadline date which is 8 business days before the meeting</small>	
3) Name of Board, Committee, Council, Sections: Choose an item. Wisconsin Advisory Council on Building Sustainability			
4) Meeting Date: 3/11/2026	5) Attachments: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6) How should the item be titled on the agenda page? Administrative Rule Matters – Discussion and Consideration 1) CR 26-106 Relating to Electrical Code 2) CR 26-019 Relating to Plumbing Code	
7) Place Item in: <input checked="" type="checkbox"/> Open Session <input type="checkbox"/> Closed Session	8) Is an appearance before the Board being scheduled? <i>(If yes, please complete Appearance Request for Non-DSPS Staff)</i> <input type="checkbox"/> Yes <Appearance Name(s)> <input type="checkbox"/> No	9) Name of Case Advisor(s), if applicable: <Click Here to Add Case Advisor Name or N/A>	
10) Describe the issue and action that should be addressed:			
11) Authorization			
 Signature of person making this request		3/2/2026 Date	
Supervisor (Only required for post agenda deadline items)		Date	
Executive Director signature (Indicates approval for post agenda deadline items)		Date	
Directions for including supporting documents: 1. This form should be saved with any other documents submitted to the Agenda Items folders. 2. Post Agenda Deadline items must be authorized by a Supervisor and the Policy Development Executive Director. 3. If necessary, provide original documents needing Board Chairperson signature to the Bureau Assistant prior to the start of a meeting.			

STATE OF WISCONSIN
DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES

IN THE MATTER OF RULEMAKING : PROPOSED ORDER OF THE
PROCEEDINGS BEFORE THE : DEPARTMENT
DEPARTMENT OF SAFETY AND : ADOPTING RULES
PROFESSIONAL SERVICES : (CLEARINGHOUSE RULE 25-016)

PROPOSED ORDER

An order of the Department of Safety and Professional Services to **repeal** SPS 316.003 (2), 316.007 (1) (am), 316.230 (1) (c), (3) (a), and (5), 316.240, 316.300 (1) (b) and (2) (a), 316.310 (1), 316.314 (2), 316.358, 316.404, and 316.511 to 316.701; to **renumber** SPS 316.006 (1); to **amend** SPS 316.002 (2) (b) and (c), 316.003 (3) and (4), 316.005 (Note 1), 316.007 (1) (intro.), (a), (Note), (b), and (2), 316.022 (1) (Note), 316.090, 316.100 (2), 316.110 (1) and (2), 316.230 (1) (a) and (3) (b), 316.250 (1) and (2) and (3), 316.300 (1) (intro.) and (2) (b), 316.310 (2), 316.312 (1) and (2) and (3), 316.314 (1), 316.334 (title) and (1) and (2), and 316.406 (1), to **repeal and recreate** SPS 316.005 (Note 2), 316.023, 316.210, 316.220, 316.225, 316.230 (4), 316.400, 316.406 (2), and 316.450, and to **create** SPS 316.002 (2) (g) and (h) and (i) and (j), 316.003 (3) (Note), 316.005 (Note 3), 316.006 (1e) and (1m), 316.007 (3) (Note), 316.012 (1) (a) 8. and 9., 316.013 (4), 316.020 (1) (Note 2), and 316.230 (3) (c) relating to the Electrical Code.

Analysis prepared by the Department of Safety and Professional Services.

ANALYSIS

Statutes interpreted:

Section 101.82 (1), Stats.

Statutory authority:

Sections 101.02 (1), 101.82 (1), 101.84 (3) and (5), and 227.11 (2) (a), Stats.

Explanation of agency authority:

Section 101.02 (1), Stats., provides that "[t]he department shall adopt reasonable and proper rules and regulations relative to the exercise of its powers and authorities and proper rules to govern its proceedings and to regulate the mode and manner of all investigations and hearings."

Section 101.82 (1), Stats., provides that "[t]he department shall promulgate by rule a state electrical wiring code that establishes standards for installing, repairing, and maintaining electrical wiring. The rules shall include separate standards, established in consultation with the uniform dwelling code council, that apply only to electrical wiring in camping units that are set in a fixed location in a campground for which a permit is issued under s. 97.67, that contain a sleeping place, and that are used for seasonal overnight camping. The rules do not apply to

electrical wiring in primitive rural hunting cabins, as defined in s. 101.61 (3). The standards established in the rules shall also take into account the uses, including seasonal use, that are unique to recreational and educational camps, as defined in s. 101.053 (1). Where feasible, the rules shall reflect nationally recognized standards.”

Section 101.84 (3) and (5) provides that “[t]he department may promulgate rules to differentiate the scope of installation, repair, or maintenance of electrical wiring that may be performed by electrical contractors, registered electricians, journeyman electricians, master electricians, and any additional types of electricians recognized under sub. (5).” and

“The department may promulgate rules that recognize and regulate different types and subtypes of electricians that are in addition to those specified in s. 101.82 (1g) and that establish criteria and procedures for enrolling, registering, or licensing these electricians.”

Section 227.11 (2) (a), Stats. provides “[e]ach agency may promulgate rules interpreting the provisions of any statute enforced or administered by the agency, if the agency considers it necessary to effectuate the purpose of the statute...”

Related statutes or rules:

- Chapters SPS 361 to 366, Wisconsin Commercial Building Code
- Chapters SPS 320 to 325, Uniform Dwelling Code
- Chapter PSC 114, Wisconsin State Electrical Code (Volume I)

Plain language analysis:

The objective of the rule is to update Wisconsin’s Electrical Code, ch. SPS 316, to reflect current national standards, to update administrative and enforcement aspects of the program, and to update and clarify outdated regulations and provisions. The rule adopts by reference the 2023 edition of the National Electrical Code (NFPA 70 National Electrical Code, 2023) standard. It contains certain specified changes, additions, and omissions to the requirements of the NEC to ensure the rules conform to current statutes and to update provisions for consistency among code chapters and Department procedure.

The majority of the proposed rule implements the Wisconsin Electrical Code’s adoption by reference of the 2023 NEC. It updates changed references, adds additional provisions, and eliminates certain provisions that have been rendered redundant due to updates to the NEC. Currently, ch. SPS 316 adopts by reference the 2017 edition of the NEC.

The rule clarifies that installations not under the jurisdiction of the state are not subject to the chapter’s rules. The rule clarifies that when hazards are created by an installation, the authority having jurisdiction may require it to be updated to the current code. The rule clarifies that a permit is required to install electrical wiring on vacant land or in any structure, unless exempted. A new requirement is created for municipal recordkeeping of inspections. For electric fences, the Department’s additional requirements beyond those of the NEC are simplified to say that the electric fence must be used in accordance with the

exact manner and purpose of the manufacturer's instructions. For requirements for GFCI and AFCI protection, the rule maintains similar exceptions to the NEC language that were previously in place. It creates some new language substitutions and exceptions to the NEC requirements regarding dwelling unit receptacle outlets on islands and peninsulas, with location requirements for receptacle outlets. The rule recreates regulations around outside branch circuits and feeders, now requiring only a few additions to the NEC requirements. Feeder or branch circuit cables may not extend more than 8 feet into a building. Where the disconnecting means is installed outside of a structure, it shall be not more than 30 feet from and within sight of the structure that it serves. The rule creates exceptions to surge protection requirements in NEC 230.67 and to emergency disconnect requirements in NEC 225.41 and NEC 230.85.

Summary of, and comparison with, existing or proposed federal statutes and regulations:

There are several existing federal regulations that relate to the installation of electrical wiring and equipment. Some of these regulations require compliance with various editions of the NEC. A search of the Code of Federal Regulations (CFR) found the following regulations pertaining to activities that may be covered by this rule.

- Title 7 CFR, Part 1755 – Telecommunications Policies on Specifications, Acceptable Materials, and Standard Contract Forms. This regulation in the Department of Agriculture applies to telecommunications wiring and equipment and requires compliance with the NEC.
- Title 24 CFR, Part 3280 – Manufactured Home Construction and Safety Standards. Subpart I of this regulation in the Department of Housing and Urban Development covers electrical systems in manufactured homes and requires compliance with the 2005 NEC.
- Title 29 CFR, Part 1910.302 through 1910.308 – Design Safety Standards for Electrical Systems, and 1910.331 through 1910.335 – Electrical Safety-Related Work Practices Standards. Subpart S of this regulation in the Department of Labor contains design safety standards for electrical systems, safety-related work practices and maintenance requirements and safety requirements for special electrical equipment to safeguard employees in their workplaces. Subpart R contains industrial lighting requirements and safe practices relating to lockouts and emergency lighting requirements for the safety of employees working in special industries. These regulations are part of the Occupational Safety and Health Standards.
- Title 29 CFR, Part 1926 – Safety and Health Regulations for Construction. Subpart K of this regulation in the Department of Labor contains installation safety requirements, safety requirements and environmental considerations for special equipment necessary to safeguard employees working in special industries.
- Title 30 CFR, Part 57 – Safety and Health Standards – Underground Metal and Nonmetal Mines. Subpart K of this regulation in the Department of Labor contains specific electrical safety requirements for the protection of employees working in underground metal and nonmetal mines.
- Title 30 CFR, Part 75 – Mandatory Safety Standards – Underground Coal Mines. Subpart F contains specific electrical safety requirements for the protection of employees working in underground metal and nonmetal mines.

Summary of public comments received on statement of scope:

A preliminary public hearing on Statement of Scope SS 019-24 was held on February 26, 2024. Two comments were received in support of the scope statement. Bill Neitzel, member of the Electrical Code Advisory Council and the Wisconsin Chapter of the International Association of Electrical Inspectors, and Brad Boycks, representing the Wisconsin Builders Association, submitted the following comments:

Name: Bill Neitzel

Organization: Wisconsin Chapter IAEI

“Please approve Scope Statement SS 019-24 for rule SPS 316 and allow the Electrical Code Advisory Council to review and recommend for adoption an updated version of SPS 316 and the 2023 National Electrical Code. Delaying any of the construction codes (building, heating, plumbing, electrical, fire and more) is detrimental to the citizens of the Great State of Wisconsin. Each delay can cause added costs by requiring variances for new products and methods, increases in insurance rates, confusion by designers and installers, the inability to use newer - cost effective and more efficient technologies and techniques and more. As a taxpayer in the State of Wisconsin my entire life and being in the electrical trade for 56+ years, I humbly request that the legislature allow the electrical code to move forward as our state motto recommends.”

Name: Brad Boycks

Organization: Wisconsin Builders Association

“Thank you for the opportunity to testify at the public hearing today on the scope statement 019-24 for SPS 302, 305, 316, 324, relating to updating the Wisconsin Electrical Code.

As I mentioned during my testimony the WBA would ask that the council to carefully consider how any changes to the electrical code would affect the cost of a single-family home or an apartment home. This past legislative session saw a historic focus to bring more workforce housing units online by making a \$525 million investment in workforce housing with a bipartisan effort. We would hate to see some of those efforts blunted by costly new requirements in any updated building code, including updates to the electrical code. Price increases to a home can have a dramatic effect on a family’s ability to receive a home mortgage. According to a recent study by the National Association of Home Builders (NAHB) a \$1000 increase to the cost of a single-family home will price out 1996 families from being able to purchase a home.

We have heard from several members who are concerned with a provision that was contained in the 2020 code update concerning emergency disconnects (230.85) and the current lack of availability for this device. We have received notice from electrical supplies with vast knowledge on current supply chain challenges in the industry that the current lead time for this device is 85 weeks (just under 2 years).

Finally, we would like to make the Electrical Code Council aware of the list of recommended amendments to the 2023 NEC electrical code that has been prepared by the NAHB for reference during the code updating process. Also for the council’s consideration is a cost analysis of the 2023 NEC code changes for single family and multifamily buildings from the Home Innovation

Research Labs.

We commend each member of the electrical code council for taking the time to review and update the current electrical code in Wisconsin and we thank you for your consideration of the enclosed comments and the materials provided by the NAHB and the Home Innovation Research Labs.

Sincerely,

Brad Boycks
Executive Director
Wisconsin Builders Association”

Comparison with rules in adjacent states:

Illinois: Illinois does not administer a statewide electrical code. However, county and municipal governments are free to adopt versions of the NEC.

Iowa: The Iowa Department of Public Safety administers a statewide electrical code that adopts the 2020 edition of the NEC with modifications [661 IAC 504.1].

Michigan: The Michigan Department of Licensing and Regulatory Affairs administers a statewide electrical code that incorporates by reference the 2017 edition of the NEC with modifications [Mich Admin Code, R 408.30801].

Minnesota: The Minnesota Department of Labor and Industry administers a statewide electrical code that incorporates by reference the 2023 edition of the NEC [Minnesota Rules, Part 1315.0200].

Summary of factual data and analytical methodologies:

The primary methodology for updating the Wisconsin Electrical Code, ch. SPS 316, was a review and assessment of the latest edition of the national technical standards that serve as the basis for Wisconsin code. Staff compared the 2023 edition of the NEC to the 2017 edition currently adopted under ch. SPS 316 and solicited code change proposals.

The Department’s review and assessment process also involved the participation of the Electrical Code Advisory Committee. The members of the Committee represent the many stakeholders involved in the electrical industry including utility representatives, inspectors, and building contractors.

Standards incorporated by reference in the proposed rule have been submitted to the Attorney General for approval pursuant to s. 227.21 (2), Stats.

Analysis and supporting documents used to determine effect on small business or in preparation of economic impact analysis:

The proposed rules were posted for 30 days to solicit public comment on economic impact, including how the proposed rules may affect businesses, local government units, and individuals. The below 3 economic impact comments were received:

Name: Bill Neitzel

Organization: Wisconsin Chapter IAEI

“After reviewing the SPS 316 Draft, it appears that the items discussed during the Electrical Code Advisory Council meetings have been captured as discussed. I would like to add some comments for the Economic Impact Analysis regarding 2 items.

The first item is the "Emergency Disconnect" that has been deleted by SPS 316.225(3) for dwelling unit outbuildings and SPS 316.230(4) for dwelling services. These "Emergency Disconnects" are required in the NEC by a joint effort of the builder's associations and the NFPA for protection of the first responders (firefighters). When the Advisory Council met and discussed these code sections, one of the concerns was the supply chain issues being seen at that time. Looking through current information, this is no longer an issue as the manufacturers have been able to catch up with demand, and the availability appears to no longer be an issue. Also, shopping online for a meter pedestal with a 200 amp main breaker coupled with a 200 amp main lug only panel vs. a meter pedestal with no main and a 200 main breaker panel, the cost difference is less than \$50 with most being less than that. As a former volunteer fireman, this is a small cost to protect those who protect us and are only interested in eliminating the hazard to their fellow responders quickly so they can perform their rescue operations safely.

My other comment is an affirmation of the Advisory Council's decision not to eliminate NEC 230.67 for surge protection of dwelling units. For more than 20 years the CPSC has had statistical data showing the amount of faulty electronic equipment and counterfeit electrical products that has been brought into our homes through various sources and especially from current online shopping trends. Many citizens in the State of Wisconsin are unaware that the electrical products they buy online may not be safe. These products range from \$60 to \$150 and are definitely not cost prohibitive when you weigh the safety vs. the cost. I have one installed in the 30 year old home that I bought 2 years ago and the added peace of mind for someone who understands the hazards were well worth the investment.

Thank you for all you do and for allowing me to provide my feedback. You are a great asset to the work we do.

Bill Neitzel”

Name: Brad Boycks

Organization: Wisconsin Builders Association

“Thank you for the opportunity to provide additional information to the department prior to the release of the Economic Impact Analysis for SPS 302, 305, 316, 324, relating to updating the Wisconsin Electrical Code. WBA would ask that DSPS continue to carefully consider

how any changes to the electrical code would affect the cost of a single-family home or an apartment home.

It appears that DSPS and the Electrical Code Advisory Committee accepted several suggestions that were previously offered by WBA and the National Association of Home Builders (NAHB) which is very much appreciated. We believe there are several proposed changes to the code that will have a negative impact on the cost of a home that we would like to point out today and hope they could be eliminated from the final rule package. Those items are:

- Two provisions in SPS 317.210 Branch Circuits:
 - Item (3) removed kitchens from the list of areas where AFCIs were required in the 2017 edition. Cost impact if this amendment is not retained: \$123 increase (and potential for callbacks due to unwanted tripping).
 - Item (7) reduces the number of receptacles (outlets) in garages to one per garage instead of one per vehicle bay. Cost impact if this amendment is not retained: \$125 increase for a 3-car garage for the additional 2 receptacles and wiring.
- We support an exception to remove the surge protection requirements in NEC 230.67 that were added in the 2020 and 2023 editions. Cost impact without an amendment: \$276 increase per home.
- The provision in SPS 316.230 (3)(c) (“Disconnecting means shall be no more than 30 feet and within sight from the building or structure it serves”) is more restrictive than the 2023 or 2026 editions of the NEC. The model code simply requires the disconnecting means to be located “on the building or within sight of the building.” This proposed change could increase the cost of a home. We could be interested in learning more about this change and why it was determined necessary.

The total annual cost increase for home buyers if the suggested amendments above are not adopted would be approximately \$7,700,000. This is based on an expected construction of 12,266 one- and two-family homes and 10,346 apartment homes.

It appears by the text provided by the DSPS that any changes to the electrical code would “take effect on the first day of the month following publication in the Wisconsin Administrative Register.” We would recommend a 6 to 12 month delayed effective date to better educate effected parties of the changes to the electrical code. We commend each member of the Electrical Code Advisory Committee and DSPS officials for taking the time to review and update the current electrical code in Wisconsin and we thank you for your consideration of the enclosed follow up comments.

Sincerely,

Brad Boycks
Executive Director
Wisconsin Builders Association”

Name: George Klaetsch

Organization: Wisconsin Precast Concrete Association

“On behalf of the Wisconsin Precast Concrete Association and other affected POWTS stakeholders, we are submitting brief written comments related to repealing SPS Code Sections related to a proposed order to update Wisconsin's electrical standards in compliance with recent NEC changes. Please see the specific code sections below.

It is our belief that updating/revising this code section will create hardships on POWTS trades and the homeowners that rely on a fully operational POWTS to dispose of their liquid waste.

It appears that in addition to complying with NEC 300 updates the department is proposing to create an exemption to current code that allows an exemption for POWTS professionals to not install GFCI receptacles on POWTS systems. The proposed rule draft release would eliminate this exemption and require GFCI receptacles if the code package is promulgated as drafted.

We believe the exemption to GFCI in current code should be maintained. If not, it will result in a significant increase in widespread septic tank false alarms when the GFCI outlet is tripped. When this occurs, the pump is no longer operational and the result of pump failure could be the contamination of septage/human liquid waste overflowing the tank and affecting ground and drinking water, and/or system backups into the basement or lower level of the residence in which the POWTS is intended to serve.

Thank you for your consideration of our comments.

George Klaetsch
WI Precast Concrete Association”

Effect on small business:

These proposed rules will not have an economic impact on small businesses, as defined in s. 227.114 (1), Stats. The Department’s Regulatory Review Coordinator may be contacted by email at Jennifer.garrett@wisconsin.gov, or by calling (608) 266-2112.

Agency contact person:

Jake Pelegrin, Administrative Rules Coordinator, Department of Safety and Professional Services, Office of Chief Legal Counsel, email at DSPSAdminRules@wisconsin.gov.

Place where comments are to be submitted and deadline for submission:

Comments may be submitted to Jake Pelegrin, Administrative Rules Coordinator, Department of Safety and Professional Services, Office of Chief Legal Counsel, 4822 Madison Yards Way, P.O. Box 14497, Madison, Wisconsin 53708-0497, or by email to

DSPSAdminRules@wisconsin.gov. Comments must be received on or before the public hearing, scheduled for March 2, 2026, to be included in the record of rule-making proceedings.

TEXT OF RULE

SECTION 1. SPS 316.002 (2) (b) and (c) are amended to read:

SPS 316.002 (2) (b) Installations for generation, transformation, or distribution of power used exclusively by railways for signaling and communication purposes, other than conductors and equipment connecting the serving utility to the wiring system of the premises served.

(c) Installations of communication equipment under exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations, other than conductors and equipment connecting the serving utility to the wiring system of the premises served.

SECTION 2. SPS 316.002 (2) (g) and (h) and (i) and (j) are created to read:

SPS 316.002 (2) (g) Installations in properties that are exempted by federal statutes or treaties.

(h) Installations in portions of buildings leased to the federal government provided all of the following conditions are met:

1. A statement is recorded with the register of deeds that describes the steps necessary for compliance with this chapter if the space is converted to a nonexempt use.

2. The statement recorded with the register of deeds is recorded in a manner that will permit the existence of the statement to be determined by reference to the property where the building is located.

3. The owner of the building submits a copy of the recorded document to the department or its authorized representative.

(i) Installations in buildings or structures located on Indian reservation land that are held either in trust by the United States, or in fee by the tribe or a tribal member.

(j) Installations in buildings or structures which are located on off-reservation Indian land that is held in trust by the United States and which are held either in trust by the United States, or in fee by the tribe or a tribal member.

SECTION 3. SPS 316.003 (2) is repealed.

SECTION 4. SPS 316.003 (3) is amended to read:

SPS 316.003 (3) EXISTING INSTALLATIONS. Existing electrical installations shall conform to the

electrical code that applied when the installations were installed. ~~An existing electrical installation may be required to be brought into compliance with the current code's requirements by the department and within the time period determined by the department when a hazard to life, health or property exists or is created by the installation.~~ When a hazard to life, health, or property exists or is created by an existing installation the authority having jurisdiction may, in the authority's sole discretion, require that the installation be brought into compliance with the current code's requirements within a time period determined by the authority.

SECTION 5. SPS 316.003 (3) (Note) is created to read:

SPS 316.003 (3) Note: Changes in use or occupancy of a space may require alterations to electrical installations to remain compliant with the provisions of the NEC and this chapter.

SECTION 6. SPS 316.003 (4) is amended to read:

SPS 316.003 (4) REPAIRS. Repairs to electrical installations shall conform to the electrical code that applied when the installations were installed. ~~A repair may be required to be brought into compliance with the current code's requirements by the department and within the time period determined by the department when a hazard to life, health or property exists or is created by the repair.~~ When a hazard to life, health, or property exists or is created by an existing installation the authority having jurisdiction may, in the authority's sole discretion, require that the installation be brought into compliance with the current code's requirements within a time period determined by the authority.

SECTION 7. SPS 316.005 (Note 1) is amended to read:

SPS 316.005 Note: Chapter SPS 303 requires the submittal of a petition for variance ~~form (SBD-9890)~~ and a fee, and that an equivalency is established in the petition for variance that meets the intent of the rule being petitioned. Chapter SPS 303 also requires the department to process regular petitions within 30 business days and priority petitions within 10 business days.

SECTION 8. SPS 316.005 (Note 2) is repealed and recreated to read:

SPS 316.005 Note: The submittal of position statements and municipal recommendations is dependent on the rule being petitioned and is specified in the code under which the variance is requested.

SECTION 9. SPS 316.005 (Note 3) is created to read:

SPS 316.005 Note: The department form required in this section is available on the department's website at <https://dsps.wi.gov>.

SECTION 10. SPS 316.006 (1) is renumbered to 316.006 (1s).

SECTION 11. SPS 316.006 (1e) and (1m) are created to read:

SPS 316.006 (1e) "Authority having jurisdiction" means an organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

Note: An authority having jurisdiction may be a municipality operating under s. SPS 316.011 (1) or the department operating under s. SPS 316.011 (2), however s. SPS 316.004 provides that "Under s. 101.02 (1), Stats., the department reserves the right to interpret the requirements in this chapter and in all adopted codes and standards. Any interpretation under this section shall supersede any differing interpretation by either a lower-level jurisdiction or an issuer of the adopted code or standard."

(1m) "Campground" means a parcel or tract of land that requires a license to operate under s. ATCP 79.05 (1).

SECTION 12. SPS 316.007 (1) (intro.), (a), and (Note) are amended to read:

SPS 316.007 (1) PRIMARY STANDARDS. The following ~~standards~~ standard is incorporated by reference into this chapter, subject to the modifications specified in this chapter:

(a) ~~Except as provided under par. (am),~~ National Fire Protection Association (NFPA), One Batterymarch Park, Quincy, MA 02169-7471, telephone 800-344-3555, www.nfpa.org: NFPA 70 National Electrical Code, (NEC) – ~~2017~~ 2023, including all Temporary Interim Amendments and Errata prior to January 1, 2025.

Note: Copies of the standards are on file in the ~~offices~~ office of the ~~Department~~ and the Legislative Reference Bureau. A copy of the code may be purchased from the organization listed or may be reviewed on the organization's website at no cost if the person is a registered user for the site.

SECTION 13. SPS 316.007 (1) (am) is repealed.

SECTION 14. SPS 316.007 (1) (b) and (2) are amended to read:

SPS 316.007 (1) (b) If a requirement in the ~~standards~~ standard adopted in ~~par. (a) and (am)~~ par. (a) ~~contains~~ contains a cross-reference to another requirement modified by this chapter, the modification shall apply to the cross-reference unless specified otherwise in this chapter.

(2) SECONDARY REFERENCES. Any codes or standards referenced in the ~~standards~~ standard adopted in sub. (1) (a) ~~and (am)~~ shall apply to the prescribed extent of each such reference, except as modified by this chapter.

SECTION 15. SPS 316.007 (3) (Note) is created to read:

SPS 316.007 (3) Note: See s. SPS 316.005 for petition for variance.

SECTION 16. SPS 316.012 (1) (a) 8. and 9. are created to read:

SPS 316.012 (1) (a) 8. Except as specifically exempted by rule or statute, vacant land for which a permit under this chapter or ch. SPS 320 has not already been issued.

9. Except as specifically exempted by rule or statute, any structure for which a permit under this chapter or ch. SPS 320 has not already been issued.

SECTION 17. SPS 316.013 (4) is created to read:

SPS 316.013 (4) Records of inspections shall comply with one of the following:

(a) *Municipal enforcement.* Municipalities that have adopted an ordinance to enforce this code shall maintain records in accordance with all of the following:

1. A record shall be made of each visit to a site, each inspection type performed and the pass or fail results of each inspection.

2. Applications, plans, forms, correction orders, correspondence, permits, and inspection records shall be maintained for 7 years after completion.

(b) *State enforcement.* Inspectors working under a state contract shall maintain records in accordance with the provisions of the contract that were in effect at the time the inspections were completed.

SECTION 18. SPS 316.020 (1) (Note 2) is created to read:

SPS 316.020 (1) Note: Changes in use or occupancy of a space may require alterations to electrical installations to remain compliant with the provisions of the NEC and this chapter.

SECTION 19. SPS 316.022 (1) (Note) is amended to read:

SPS 316.022 (1) Note: Examples of a qualified independent third party include a nationally recognized testing laboratory and a professional engineer registered in the state of Wisconsin.

SECTION 20. SPS 316.023 is repealed and recreated to read:

SPS 316.023 Electric fences. The following is a department rule in addition to the requirements of the NEC: Electric fence controllers shall be installed and used in the exact manner and for the exact purpose indicated by the manufacturer's instructions, markings, listings or labels.

Note: Under s. 101.18, Stats., the Department is responsible for establishing "...reasonable standards, rules or regulations for the erection, construction, repair and maintenance of electric fences as shall render them safe."

SECTION 21. SPS 316.090 is amended to read:

SPS 316.090 Introduction. The requirements specified in ~~2011 and 2017~~ NEC 90.1, NEC 90.2, and NEC 90.4 are not included as part of this chapter.

SECTION 22. SPS 316.100 (2) is amended to read:

SPS 316.100 (2) SUBSTITUTIONS. The following department definition is a substitution for the respective definition in ~~2011 and 2017~~ NEC 100: “~~Special permission~~” means permission means a petition for variance in accordance with s. SPS 316.005.

SECTION 23. SPS 316.110 (1) and (2) are amended to read:

SPS 316.110 (1) Substitute the following wording for the requirements in ~~2011~~ NEC 110.3 (B): ~~Listed Equipment that is listed, or labeled equipment shall be installed or used, or both, or identified for a use shall be installed and used~~ in accordance with any instructions included in the listing, ~~or labeling, or identification~~ provided the instructions, listing, or labeling do not conflict with this chapter.

(2) This is a department exception to the requirements of ~~2017~~ NEC 110.3 (C): Exception: As provided under s. SPS 316.022 (1), product testing and evaluation may be conducted by a qualified independent third party, including a nationally recognized testing laboratory or a professional engineer registered in the state of Wisconsin.

SECTION 24. SPS 316.210 is repealed and recreated to read:

SPS 316.210 Branch circuits.

(1) GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.

(a) Substitute the following wording for NEC 210.8 (A): All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the following locations shall have ground-fault circuit interrupter protection for personnel:

(b) Substitute the following wording for NEC 210.8 (A) (5): Unfinished portions or areas of the basement not intended as habitable rooms.

(c) The requirements in NEC 210.8 (A) (7) are not included as part of this chapter.

(d) The requirements in NEC 210.8 (D) (8), (9), (10), and (11) are not included as part of this chapter.

(e) The requirements in NEC 210.8 (F) are not included as part of this chapter.

(2) ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION. The requirements in NEC 210.12 (E) are not included as part of this chapter.

(3) DWELLING UNIT RECEPTACLE OUTLETS.

(a) Substitute the following wording for NEC 210.52 (C) (2): At least one receptacle shall be installed at each island and peninsular countertop space with a long dimension of 600 millimeters (24 inches) or greater and a short dimension of 300 millimeters (12 inches) or greater. A peninsular countertop is measured from the connected perpendicular wall.

(b) This is a department exception to the requirements of NEC 210.52 (C) (3): To comply with the following conditions 1. and 2., receptacle outlets shall be permitted to be mounted not more than 300 millimeters (12 inches) below the countertop or work surface. Receptacles mounted below a countertop or work surface in accordance with this exception shall not be located where the countertop or work surface extends more than 150 millimeters (6 inches.) beyond its support base. Receptacles mounted below a countertop or work surface in accordance with this exception shall not be located where the countertop or work surface extends more than 150 millimeters (6 inches) beyond its support base.

1. Construction for the physically impaired

2. On island and peninsular countertops or work surface where the surface is flat across its entire surface (no backsplashes, dividers, etc.) and there are no means to mount a receptacle within 500 millimeters (20 inches) above the countertop or work surface, such as an overhead cabinet.

SECTION 25. SPS 316.220 is repealed and recreated to read:

SPS 316.220 Branch-circuit, feeder and service calculations. Substitute the following wording for NEC 220.5 (C): The floor area for each floor shall be calculated from the outside dimensions of the building, dwelling unit, or other area involved. For dwelling units, the calculated floor area shall not include open porches, garages, or unfinished areas not adaptable for future use as a habitable room or occupiable space.

SECTION 26. SPS 316.225 is repealed and recreated to read:

SPS 316.225 Outside branch circuits and feeders.

(1) NUMBER OF SUPPLIES. This is a department rule in addition to the requirements in NEC 225.30: Multi-occupancy buildings or structures may have one set of branch circuit conductors installed from a dwelling unit to the second building or structure's respective occupied space.

(2) LOCATION. The following are department rules in addition to the requirements of NEC 225.31:

(a) This is a department rule in addition to the requirements of NEC 225.31 (B): Raceways containing feeder or branch circuit conductors, or feeder or branch circuit cables not contained within a raceway, may not extend longer than 8 feet into a building to the disconnect or the first disconnect of a group of disconnects as permitted by NEC 225.33. The raceways, cables, or conductors shall be considered to have entered the building at the point where they pass through the outer surface of the building exterior, except as permitted by NEC 230.6.

(b) Where the disconnecting means is installed outside of a building or structure the disconnecting means shall be located not more than 30 feet from and within sight of the building or structure that the disconnect serves.

(3) EMERGENCY DISCONNECTS. The requirements of NEC 225.41 are not included as part of this chapter.

SECTION 27. SPS 316.230 (1) (a) is amended to read:

SPS 316.230 (1) (a) This is a department informational note to be used under ~~2011 and 2017~~ NEC 230.2 (intro.): Note: It is recommended that the electric utility or cooperative supplying electric current be contacted prior to service equipment installations for any special requirements.

SECTION 28. SPS 316.230 (1) (c) is repealed.

SECTION 29. SPS 316.230 (3) (a) is repealed.

SECTION 30. SPS 316.230 (3) (b) is amended to read:

SPS 316.230 (3) (b) Location. This is a department rule in addition to the requirements of ~~2011 and 2017~~ NEC 230.70 (A): Raceways containing service conductors or cables, or service entrance cable not contained within a raceway, may not extend longer than 8 feet into a building to the service disconnect or the first service disconnect of a group of disconnects as permitted by NEC 230.71. The raceways or conductors shall be considered to have entered the building at the point where they pass through the outer surface of the building exterior, except as permitted by NEC 230.6.

SECTION 31. SPS 316.230 (3) (c) is created to read:

SPS 316.230 (3) (c) Where the service disconnecting means is installed outside of a building or structure, the service disconnecting means shall be no more than 30 feet and within sight from the building or structure it serves.

SECTION 32. SPS 316.230 (4) is repealed and recreated to read:

SPS 316.230 (4) EMERGENCY DISCONNECTS. The requirements of NEC 230.85 are not included as part of this chapter.

SECTION 33. SPS 316.230 (5) is repealed.

SECTION 34. SPS 316.240 is repealed.

SECTION 35. SPS 316.250 (1), (2), and (3) are amended to read:

SPS 316.250 (1) SUPPLEMENTAL ELECTRODE REQUIRED. The exception in ~~2011 and 2017~~ NEC 250.53 (A) (2) is not included as part of this chapter.

(2) SUPPLEMENTAL ELECTRODE. This is a department rule in addition to the requirements in ~~2011 and 2017~~ NEC 250.53 (A) (3): A single electrode consisting of a rod, pipe or plate shall be augmented by one additional electrode of any of the types in NEC 250.52 (A) (4) to (A) (8).

(3) TYPES OF EQUIPMENT GROUNDING CONDUCTORS. This is a department rule in addition to the requirements of ~~2017~~ NEC 250.118: A metallic raceway installed in direct contact with earth, in concrete slabs or floors poured on earth, or in exterior concrete walls below grade shall be augmented with a supplemental equipment grounding conductor identified in NEC 250.118 (A) (1). This supplemental conductor shall be sized in accordance with NEC 250.122. An aluminum equipment grounding conductor used for this purpose shall be insulated.

SECTION 36. SPS 316.300 (1) (intro.) is amended to read:

SPS 316.300 (1) ELECTRICAL REQUIREMENTS FOR PRIVATE ONSITE WASTEWATER TREATMENT SYSTEMS. These department rules apply to private onsite wastewater treatment systems and are in addition to the requirements of ~~2011 and 2017~~ NEC 300:

SECTION 37. SPS 316.300 (1) (b) and (2) (a) are repealed.

SECTION 38. SPS 316.300 (2) (b) is amended to read:

SPS 316.300 (2) (b) This is a department exception in addition to the exceptions under ~~2017~~ NEC 300.4 (D): Exception No. 4: This distance does not need to be maintained within 8 inches of a device, junction box, splice, or termination point.

SECTION 39. SPS 316.310 (1) is repealed.

SECTION 40. SPS 316.310 (2) is amended to read:

SPS 316.310 (2) This is a department rule in addition to the requirements in ~~2017~~ NEC 310.15 ~~(B)~~ ~~(3)~~ ~~(a)~~ (C) (1): The derating factors shown in NEC Table 310.15 ~~(B)~~ ~~(3)~~ ~~(a)~~ (C) (1) do not apply to branch circuits supplying an individual dwelling unit.

SECTION 41. SPS 316.312 (1), (2), and (3) are amended to read:

SPS 316.312 (1) CABLES. Substitute the following wording for ~~2011 and 2017~~ NEC 312.5 (C) Exception No. 1 (intro.): Exception No. 1: Cables with entirely nonmetallic sheaths may enter an enclosure through one or more nonflexible raceways of not less than 12 inches and not more than 10 feet in length, provided all of the following conditions are met:

(2) OMISSION. The requirements specified in ~~2011~~ NEC 312.5 (C) Exception paragraph ~~(b)~~ and ~~2017~~ NEC 312.5 (C) Exception ~~number 2~~ No. 1 sub. (2) are not included as part of this chapter.

(3) FITTING. Substitute the following wording for ~~2011~~ NEC 312.5 (C) Exception paragraph ~~(c)~~ and ~~2017~~ NEC 312.5 (C) Exception ~~number 3~~ No. 1 sub. (3): A fitting is provided on each end of

the raceway to protect the cable from abrasion.

SECTION 42. SPS 316.314 (1) is amended to read:

SPS 316.314 (1) CONDUCTORS ENTERING BOXES, CONDUIT BODIES, OR FITTINGS. This is a department exception to the requirements of ~~2011 and 2017~~ NEC 314.17 (B) ~~and (C)~~: Exception: Nonmetallic sheathed cable is not required to be secured to the ~~box enclosure~~ or conduit body where it is installed in accordance with ~~the wiring method specified in~~ s. SPS 316.312.

SECTION 43. SPS 316.314 (2) is repealed.

SECTION 44. SPS 316.334 (title), (1), and (2) are amended to read:

SPS 316.334 Nonmetallic-sheathed cable: Types NM, and NMC ~~and~~ NMS.

(1) USES PERMITTED. Substitute the following wording for ~~2011 and 2017~~ NEC 334.10 (3): Other structures permitted to be of Types III, IV, and V construction except as prohibited in NEC 334.12.

(2) TYPES NM, AND NMC, ~~AND~~ NMS. The requirements specified in ~~2011 and 2017~~ NEC 334.12 (A) (2) are not included as part of this chapter.

SECTION 45. SPS 316.358 is repealed.

SECTION 46. SPS 316.400 is repealed and recreated to read:

SPS 316.400 Flexible cords and cables. Substitute the following wording for the exception in NEC 400.12 (4): Exception: Flexible cord and flexible cable may be attached to building surfaces for a use permitted under NEC 400.10 (A) if all of the following apply:

(1) The source is not a busway.

(2) The equipment is adequately supported.

(3) The type of cable and attachment to the building, the equipment, and the support comply with the provisions of NEC 368.56 (B) and 590.4.

SECTION 47. SPS 316.404 is repealed.

SECTION 48. SPS 316.406 (1) is amended to read:

SPS 316.406 (1) ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION. The requirements in ~~2011 and 2017~~ NEC 406.4 (D) (4) are not included as part of this chapter.

SECTION 49. SPS 316.406 (2) is repealed and recreated to read:

SPS 316.406 (2) BATHTUB AND SHOWER SPACE. Substitute the following wording for NEC 406.9

(C): Receptacles shall not be installed within or directly over a bathtub or shower stall.
Exception: Weight supporting ceiling receptacles (WSCR) shall be permitted to be installed for listed luminaires that employ a weight supporting attachment fitting (WSAF) in damp locations complying with NEC 410.10 (D).

Note: See NEC 210.8 (A) (1) for GFCI requirements in a bathroom.

Note: See NEC 210.11 (C) for requirements for bathroom branch circuits.

SECTION 50. SPS 316.450 is repealed and recreated to read:

SPS 316.450 Transformers and transformer vaults (including secondary ties), location.

Substitute the following wording for NEC 450.41: Vaults containing oil-insulated transformers shall be located where the vaults can be ventilated to the outside air without using flues or ducts, except where a petition for variance is approved.

SECTION 51. SPS 316.511 to 316.701 are repealed.

SECTION 52. EFFECTIVE DATE. The rules adopted in this order shall take effect on the first day of the month following publication in the Wisconsin Administrative Register, pursuant to s. 227.22 (2) (intro.), Stats.

(END OF TEXT OF RULE)

STATE OF WISCONSIN
DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES

IN THE MATTER OF RULEMAKING	:	PROPOSED ORDER OF THE
PROCEEDINGS BEFORE THE	:	DEPARTMENT
DEPARTMENT OF SAFETY AND	:	ADOPTING RULES
PROFESSIONAL SERVICES	:	(CLEARINGHOUSE RULE)

PROPOSED ORDER

An order of the Department of Safety and Professional Services to **repeal** SPS 381.01 (22), (50e) (a) and (b) and (c), (80m), (153m) (a) and (b) and (c), (203m), 382.32 (3) (a) 3. (Note), (4) (b) 1. e., 382.33 (7) (a) 3. and (9) (fm), 382.34 (4) (c) (Note), (15) (g), 382.40 (5) (am), (8) (b) 10. (Note), (d) 3. b. and (i) 3. (Note), 382.41 (4) (o), 382.50 (3) (b) 10. and 11. b., Table 384.11, 384.20 (6) (b), 384.30 (5) (c) 4. and 6. and 7. and 8. and 9. and 10. and 13. and 14. and 15. and 16. and 17. and 18. and 19., 384.40 (2) (a) 2., (b) 4., and (12) (a); to **amend** SPS 381.01 (50c) and (50e) (intro.), (65m), (80), (82), (116), (117m), (152), (153e) and (153m) (intro.), (153s), (203), (204), (231m), and (284), Table 381.20-3e, Table 381.20-4, Table 381.20-5, Table 381.20-12, Table 381.20-13, 382.20 (1) (c), Table 382.20-1, (4) (d) 1. a., and (13) (e), 382.22 (2) (b), 382.30 (10) (c) (intro.), (14) (a) 1., 382.31 (17m) (intro.) and (f), 382.32 (3) (a) (intro.), 1. and 2. (intro.), a. and b., (4) (b) 1., a. and b. and d., 382.33 (5) (b) (Note), (9) (g) 1., 382.34 (5) (d) 4., 382.35 (3) (k), Table 382.36-1 (Title), Table 382.36-3, 382.36 (7) (d) 1m., (e), (8) (b) 3., 382.37 (Title), (3) (Title), (a) (intro.), 3. and 6., (b) 1., 382.40 (3) (b) (intro.), (c) 4., (d) 4., (4) (c) 1. d., (5) (a), (6) (a), (c) 1. to 3., 4. a., (7), (Note 1), (c) and (e) and (g), (8) (b) 10., 382.41 (3) (a) 1., (b) 3. a., 6. b., (c) 1. (intro.) and 2. and 3., (4) (a) and (d) (intro.), (e) 1. to 3., (g) 1. and 3., (i) and (k) (intro.), 2m., (m) and (n) (intro.), 2., (5) (c), (d) 2., (e) 1. (intro.), 3. a., (f) (intro.), (g), 382.50 (3) (b) 14., 382.51 (3) (a) 1., (b) (intro.), 1. and 2., (c), 383.21 (3) (f), 383.54 (3) (b) and (4) (a), 384.11, 384.20 (2) (b) and (Note), (4) (b) 2., (5) (a), (b) 1. b., (d), (e) 1., (f) 1., (g) (Title) and 1. to 3., (h) 1., (j) 1. a. to e., 2., (5) (L) 1. and 4., (m) 1. a. to e., (n) 1. a. and b., 5., (o) 1. a. and b., and 6., (p) 6., (q) and (r) (Title) and 1., (6) (a), (c) (intro.), 2. b. and c., Table 384.30-1, Table 384.30-2, Table 384.30-3, Table 384.30-4, Table 384.30-5, 384.30 (3) (d), (e) 3. (Note), Table 384.30-6, Table 384.30-7, Table 384.30-8, (5) (a), (c) 1. to 3., (d) 1., (6) (c) and (e) and (f), (i) 1. and (j), 384.40 (6) (a) and (b), (7) (a) and (b), (8) (a) and (d), (9) (a), (12) (intro.), (b) and (c), (14) (a) 2., (b), (16), and (18); to **repeal and recreate** SPS 325.01, 381.01 (141), Table 382.22-1, 382.40 (7) (g) 4., Table 382.41-1, 382.51 (1) and (2); and to **create** SPS 381.01 (8m), (50a), (50w), (51m), (152) (Note), (153w), (201g), (201r), 382.30 (5) (d) and (e), (11) (e) 6., (15), Table 381.20-3a, 382.32 (3) (a) 4. and 5., 382.36 (8) (b) 3. (Note), 382.37 (3) (a) 8. to 11., (b) 7. and 8. and 9., 382.40 (3) (b) 1. c., (f), (7) (Note 2) and (Note 3), (8) (b) 11., (L), 382.41 (3) (b) 8., (d) 1. (Note), 382.51 (3) (b) 3., 384.20 (4) (b) 2. a. and b., (5) (am), (dm), (fm), (g) 4., (L) 5., (o) 7., Table 384.20-2, (7), Table 384.20-3, 384.30 (1) (a) to (f), (1m), Table 384.30-9, (5) (bm), Table 384.30-10, (c) 22. to 27., (6) (h) 4., 384.40 (12m), (16) (a) to (e), and (18) (a) to (e), relating to plumbing code review.

Analysis prepared by the Department of Safety and Professional Services.

ANALYSIS

Statutes interpreted:

Sections 145.02 (1), 145.20 (2) (i) and (5) (a), and 145.24 (2), Stats.

Statutory authority:

Sections 101.02 (1) (b), 145.02 (2) (a) and (b), 145.02 (3) (g) and (h), 145.02 (4) (a) and (b), and 227.11 (2) (a), Stats.

Explanation of agency authority:

Section 101.02 (1) (b), Stats.: “[t]he department shall adopt reasonable and proper rules and regulations relative to the exercise of its powers and authorities and proper rules to govern its proceedings and to regulate the mode and manner of all investigations and hearings...”

Section 145.02 (2) (a), Stats.: “[t]he department shall have general supervision of all plumbing described under sub. (1). The department shall promulgate rules that shall uniformly apply to all types of buildings, private or public, rural or urban, including buildings owned by the state or any political subdivision. The rules promulgated by the department shall constitute the state plumbing code. The state plumbing code shall comply with ch. 160. To the extent that the historic building code applies to the subject matter of these standards, the standards do not apply to a qualified historic building if the owner elects to be subject to s. 101.121. The standards do not apply to a primitive rural hunting cabin, as defined in s. 101.61 (3).”

Section 145.02 (2) (b), Stats.: “[t]he department shall promulgate rules that establish separate plumbing standards applicable only to camping units that are set in a fixed location in a campground for which a permit is issued under s. 97.67, that contain a sleeping place, and that are used for seasonal overnight camping. The standards established in the rules shall also take into account the uses, including seasonal use, that are unique to recreational and educational camps, as defined in s. 101.053 (1). If the department has appointed one or more committees under s. 227.13 to advise the department on rule making with respect to private on-site wastewater treatment systems or other plumbing systems, the department shall promulgate the rules required under this paragraph in consultation with those committees.”

Section 145.02 (3) (g) and (h), Stats.: “[t]he department may exercise such powers as are reasonably necessary to carry out the provisions of this chapter. It may, among other things:

(g) By rule, fix fees for the examination and approval of plans of plumbing systems and collect the same.

(h) Promulgate rules concerning the testing of cross-connection control devices, including rules identifying the types of cross-connection control devices that may be tested only by a registered cross-connection control tester and the circumstances under which cross-connection control devices shall be tested.”

Section 227.11 (2) (a), Stats.: “[e]ach agency may promulgate rules interpreting the provisions of any statute enforced or administered by the agency, if the agency considers it necessary to effectuate the

purpose of the statute, but a rule is not valid if the rule exceeds the bounds of correct interpretation.”

Related statutes or rules:

- Chapters SPS 361 to 366, Wisconsin Commercial Building Code
- Chapters SPS 320 to 325, Uniform Dwelling Code

Plain language analysis:

Chapters SPS 381 to 387, referred to collectively as the “Wisconsin Plumbing Code”, apply uniformly to the design, construction, installation, supervision, maintenance, and inspection of plumbing, including POWTS, sanitary and storm drainage, water supplies, wastewater treatment, dispersal, or discharge for buildings, as well as plumbing products. The Wisconsin Plumbing Code is uniform in application, meaning municipalities may not enact ordinances that are more stringent, except as specifically permitted.

Pursuant to s. 145.02, Stats., the purpose of the plumbing code is to provide that all plumbing in connection with buildings and facilities in the state, including buildings owned by the state or any political subdivision shall be safe and sanitary as to safeguard the public health and the waters of the state. While Wisconsin does not adopt a nationally recognized model plumbing code, the proposed rule incorporates several nationally recognized technical standards, most of which are also incorporated in the model plumbing codes. This rule project updates technical standards, either incorporated by reference or permitted for use, to align Wisconsin’s rules with national standards and best practices for safe plumbing systems.

The objective of the proposed rule is to fix inconsistencies between the current plumbing code, other department rules, and other national standards the department has adopted. In addition, this project addresses changes in federal standards for use of lead in plumbing materials. This project will modify code language to help increase clarity for stakeholders. The department has consulted with the Plumbing Code Advisory Committee and other stakeholders to improve consistency between plumbing code, other department codes, national regulations and standards. This rule project reviewed requirements for the design, construction, installation, inspection and maintenance of plumbing systems. This rule also examined the requirements to ensure the quality and proper installation of plumbing products. Finally, standards incorporated by reference have been reviewed and updated as needed.

In ch. SPS 381, Definitions and Standards, the rule makes several changes to definitions. The rule repeals some definitions that are considered obsolete in the industry. The rule creates new definitions for several terms frequently used in the existing code, and for new terms developed in this project. The rule also amends several definitions as necessary to correspond with amended language in this rule, especially with cross connection control, manufactured homes, and campgrounds. The rule recreates the definition of “lead-free” to bring the term in compliance with federal lead-free requirements. Also in ch. SPS 381, the rule amends several of the tables regarding incorporating plumbing standards by reference. The rule also amends the titles of some standards for consistency with the official titles of the standards and for consistency within the code.

In ch. SPS 382, Design, Construction, Installation, Supervision, Maintenance and Inspection of

Plumbing, the rule project aims to update technical standards either incorporated by reference or permitted for use, and to align Wisconsin's Plumbing Code with national standards and best practices for safe plumbing systems. Many identified updates relate to cross connection control. Names of cross connection control assemblies, methods, and devices are amended to match updated terminology in the field. Also, the rule clarifies that assemblies serving automatic fire sprinkler systems are not required to be registered with the department. Additionally, the rule clarifies that reporting to the department is not required for removal or replacement of an assembly serving an automatic fire sprinkler system, that is not required to be registered with the department, unless the assembly is already registered. The project created several provisions and amended provisions that will clarify regulations on plumbing for campgrounds, recreational vehicle parks, and manufactured homes. The rule created a new subsection with more comprehensive regulations for elevator threshold drains. Further, the project clarified appropriate requirements for any water heater. The project also made new requirements for check valves. The rule includes master plumbers in the list of professions allowed to provide analysis on sizing of water supply piping. In general, the project updated code language to increase clarity and prevent stakeholder confusion. The updated technical regulations will increase safety and efficiency.

In ch. SPS 383, Private Onsite Wastewater Treatment Systems, the project updated requirements to clarify that a governmental unit may deny the issuance of a sanitary permit if an existing POWTS system is determined to be failing and another system is readily available. The rule specified some new requirements for POWTS inspection and servicing including increased inspection requirements in some situations.

In ch. SPS 384, Plumbing Products, the project makes changes to the organization of the chapter to increase clarity, organization, and ease of use. Specifically, the project repealed Table 384.11, and recreated and reorganized the component parts of the table into relevant sections of the chapter. Additionally, the rule removed obsolete standards and incorporated new standards as needed. The project created new, smaller tables for several of the component parts of the repealed Table 384.11. The rule updated code language and applicability for some standards to increase safety and efficiency in response to stakeholder feedback and to align with national standards. Further, the rule created an exception for allowed sizing of shower compartments. The project extends the requirements for floor drains to also apply to trench drains. The rule creates new specifications for pipe and tubing and conditions of installation of pipe and tubing in general. The project addresses changes for the purpose of modernizing plumbing products and increasing safety.

Summary of, and comparison with, existing or proposed federal statutes and regulations:

Several existing federal regulations relate to plumbing code in Wisconsin. Some of these regulations require compliance with prior editions of the International Plumbing Code (IPC), a national model code developed by the International Code Council (ICC), and the Uniform Plumbing Code (UPC), a national model code developed by the International Association of Plumbing and Mechanical Officials. A search of the United States Code (USC) found the following existing federal rules that impact plumbing:

The provisions of 24 USC § 3280.601-612 cover the "Manufactured Home Construction and Safety Standards" law. This law sets standards for plumbing materials, fixtures, and equipment installed within or on manufactured homes.

"Safe Drinking Water Act" is codified under 42 USC § 300f-9. This law regulates plumbing for the purpose of protecting drinking water from contaminants. The provisions identify the acceptable level of contaminants in drinking water.

Under 42 USC § 300g-1, the provisions of the "National Primary Drinking Water Law" are codified. This law establishes primary drinking water regulations pursuant to section 1412 of the Public Health Service Act, as amended by the Safe Drinking Water Act. Regulated by the US Environment Protection Agency (EPA). The regulations are applicable to public water systems including monitoring requirements for lead and copper in tap water.

"The Reduction of Lead in Drinking Water Act" is a federal law that amended the Safe Drinking Water Act (SDWA). The Act sets new, lower standards for permitted lead amounts in plumbing products that encounter potable water. SDWA is codified under 42 USC § 300g-6 section 1417. The law reduces the permissible levels of lead in the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures to a weighted average of not more than 0.25%. EPA has primary responsibility for interpreting SDWA. Individual states utilize health or plumbing codes or other standards consistent with the SDWA and EPA regulations to enforce those standards.

The provisions of 40 USC § 143.10-143.20 and 42 USC § 300j-24 identify guidance on lead contamination drinking water. The identified provisions identify guidance to decrease or eliminate lead contamination in drinking water. Each state is required to develop a testing program to remedy lead contamination and meet the lead-free federal definition.

The Food and Drug Administration sets standards for manufacturing practice for finished pharmaceuticals. Federal codes under 21 CFR § 210-211 establish standards for plumbing in buildings and facilities that manufacture pharmaceuticals.

The federal code section, 30 CFR § 71.402 was established by the Department of Labor to protect miner's safety and health. The code sets minimum requirements for bathing facilities, changing rooms, and sanitary flush toilet facilities.

The Energy Policy and Conservation Act, as amended (EPCA), requires the Department of Energy to administer an energy and water conservation program for certain major household appliances and commercial equipment, including certain plumbing products such as shower heads, faucets and water closets. The regulations implementing EPCA are found under 10 CFR § 430.

Summary of public comments received on statement of scope:

A preliminary public hearing on Statement of Scope SS 073-24 was held on August 2, 2024. Three comments were received in support of the scope statement. Steve Breitlow submitted a comment representing Plumbers Local Union 75. Jeffrey Beiriger submitted a comment representing the Plumbing-Heating-Cooling-Contractors Association of Wisconsin. Jeff Gaecke representing the Mechanical Contractors Association of Wisconsin and Jonathan Kowalski representing the Plumbing and Mechanical Contractors Association jointly submitted a comment.

Name: Steve Breitlow

Organization: Plumbers Local Union 75

“On behalf of Plumbers Local Union 75, I support this scope statement and this rule making initiative. Upon thorough analysis and application of the final Plumbing Code update completed last year, several issues were identified that warrant clarification and review.

I look forward to a robust, but expeditious, process to ensure appropriate changes are made for consistent regulation pursuant to the Code, proper training and education pursuant to the Code, and most importantly, maintaining public health and safety.”

Name: Jeffrey Beiriger

Organization: Plumbing-Heating-Cooling-Contractors Association of Wisconsin

“I am writing on behalf of the Plumbing-Heating-Cooling-Contractors Association of Wisconsin, in support of the Scope Statement for SS 073-24.

PHCC-WI has worked closely with the Department on changes to the plumbing and related codes for many years, including the project that resulted in the code changes in the Fall of 2023.

Upon completion of that project, we were advised that there were several places where changes would be necessary for the integrity of the code - incorrect references, missing references, etc.

While unfortunate, what we hoped for then - and now - is an updated plumbing code that is correct, and can be used effectively by designers of plumbing systems, apprentice and journeyworker instructors, contractors, inspectors, plan reviews and others.

This project is necessary to achieve that goal and so we support the Scope Statement and look forward to continuing our partnership, working with the DSPS, to achieve a more perfect plumbing code, a vital component of public health and safety for the people of Wisconsin.”

Name: Jeff Gaecke and Jonathan Kowalski

Organization: Mechanical Contractors Association of Wisconsin and Plumbing and Mechanical Contractors Association

“On behalf of the Mechanical Contractors Association of Wisconsin and the Plumbing and Mechanical Contractors Association, we are joining forces to support the review of Scope Statement SS 073-24 for rules SPS 381 to 387, relating to Plumbing Code. Upon reviewing the final Plumbing Code update completed last year, several issues were identified that require clarification and review. We look forward to the rule making process to ensure appropriate changes are made for consistent regulation pursuant to the code, proper training and education pursuant to the code, and most importantly, maintaining public health and safety.”

Comparison with rules in adjacent states:

Illinois:

The Illinois Plumbing Code is administered by the Illinois Department of Public Health (IDPH).

The IDPH licenses plumbers, plumbing contractors, plumbers' apprentices, irrigation contractors and retired plumbers other than those regulated by a local ordinance under the Illinois Plumbing License Law. All people engaged in plumbing must comply with the minimum code of standards for plumbing and the fixtures, materials, design, and installation methods of plumbing systems. The Plumbing Code Advisory Council, whose members are appointed by the state's governor, consults with and advises the IDPH.

Cities, villages, or incorporated towns with a population of 500,000 or more may, by an ordinance containing provisions substantially the same as those in the Illinois Plumbing License Law and specifying educational or experience requirements equivalent to those prescribed in the Illinois Plumbing License Law, provide for a board of plumbing examiners to conduct examinations for, and to issue, suspend, or revoke, plumbers' licenses, within such city, village or incorporated town (77 Ill. Admin. Code 890).

Iowa:

The Iowa Plumbing Code is administered by the Iowa Department of Public Health (IDPH). Iowa currently adopts the 2024 edition of the Uniform Plumbing Code (UPC), including Sections 101 and 102, chapters 2-17 and appendices A and M, with amendments. (Iowa Admin. Code r. 641-25.1(105)). Iowa law requires the Iowa Plumbing and Mechanical Systems Board to adopt the most current version of the UPC within six months of its release as the state's plumbing code to govern the installation of plumbing in the state. Local jurisdictions are not required to adopt by ordinance the state plumbing code but a local jurisdiction that adopts the state plumbing code may adopt standards that are more restrictive. Local jurisdictions are not required to conduct inspections or take any other enforcement action under the state plumbing code regardless of whether they adopt the state plumbing code. A city may set standards and requirements which are more stringent, but not less stringent, than those imposed by state law.

The Iowa Plumbing and Mechanical Systems board performs investigations and administers and enforces Iowa law regarding the licensing and regulation of plumbers, mechanical professionals, and contractors. Anyone working in these disciplines in the state of Iowa is required to be licensed with the board except for an enumerated list of activities found in Iowa Admin. Code r. 105.11, primarily consisting of individuals performing specific work on their own home, professionals engaged in related trades, and government employees working on government facilities.

Michigan:

The Plumbing Division of the Michigan Department of Licensing and Regulatory Affairs (LARA) is responsible for the administration and enforcement of the Michigan Plumbing Code and the plumbing provisions of the Michigan Residential Code by conducting inspections of plumbing equipment and installations. Michigan's plumbing code establishes minimum standards and currently adopts the 2021 edition of the International Plumbing Code (Mich. Admin. Code r. 408.30701). Michigan licenses plumbing apprentices, journey plumbers, master plumbers, plumbing contractors, and plumbing inspectors. Michigan law creates a state plumbing board consisting of the director of the department of licensing and regulatory affairs or his or her authorized representative, the director of the department of environmental quality or his or her authorized representative, a member or employee of the drinking water and radiologic protection

division of the department of environmental quality, selected by the director of the department of environmental quality, and five members who are appointed by the governor for 3-year terms and who are United States citizens and residents of the state. The board recommends to the state construction code commission the promulgation of rules the board considers necessary for the safe design, construction, installation, alteration, and inspection of plumbing. The board may also recommend acceptability under the state construction code for a material, product, method of manufacturing, or method of construction or installation of plumbing equipment. (See MCL §§ 339.6101 to 339.6133).

Minnesota:

The Minnesota Plumbing Code is administered and enforced statewide by the commissioner of the Minnesota Department of Labor and Industry and incorporates the 2018 edition of the Uniform Plumbing Code, with amendments (Minn. R. 4714.0050). The state plumbing code is a section of the Minnesota State Building Code. The plumbing code establishes minimum requirements and applies to all new plumbing installations performed anywhere in the state, including additions, extensions, alterations, and replacements, unless an agreement exists between the commissioner and the municipality. The state may enter into agreements with local municipalities for plan approval and inspections if the municipality adopts the state plumbing code by ordinance. Governmental units may not adopt regulations that are in conflict with the code. The 14-member Minnesota State Plumbing Board, of which 12 members are appointed by the governor, has the authority to license plumbing contractors and restricted plumbing contractors, master plumbers and restricted master plumbers, and journeyworker plumbers and restricted journeyworker plumbers. Registered plumber's apprentice and registered unlicensed plumbers are allowed to assist in the installation of plumbing under the direct supervision of one of the other categories of licensed plumbers.

Summary of factual data and analytical methodologies:

This proposed rule was developed in consultation with the Plumbing Code Advisory Committee. The committee consists of seven individuals appointed by the DSPS Secretary under the authority of ss. 227.13 and 440.042 (1), Stats. The purpose of the Plumbing Code Advisory Committee is to consult with and advise the Department on plumbing standards as set forth in Wis. Admin. Code chs. SPS 381 to 387. The committee has advisory powers only.

Beginning in August 2024, the Plumbing Code Advisory Committee held several meetings to comprehensively review proposals presented by the Department's Division of Industry Services Plumbing Section, committee members, stakeholders, and the public.

Standards incorporated by reference in the proposed rule will be submitted to the Attorney General for approval pursuant to s. 227.21 (2), Stats.

Analysis and supporting documents used to determine effect on small business or in preparation of economic impact analysis:

The proposed rules were posted for a period of 14 days to solicit public comment on economic impact, including how the proposed rules may affect businesses, local government units, and individuals. The following EIA comment was received:

Name: Kenneth Thiele, WCCA President
Organization: Wisconsin County Code Administrators Association

“Wisconsin County Code Administrators Association (WCCA) represents zoning and code enforcement professionals that administer zoning and private onsite wastewater treatment system (POWTS) related functions. The WCCA Executive Board has been made aware of a proposed rule change to the frequency of POWTS maintenance. Specifically, a change for property owners that have their POWTS inspected, but the tank not pumped. This letter represents the efforts and opinions of the Wisconsin County Code Administrators Association.

WCCA acknowledges the need for more consistent reporting practices and regulations for pumpers and POWTS maintainers. This is certainly an area that the Department of Natural Resources (DNR) and the Department of Safety and Public Services (DSPS) should look into. However, WCCA strongly opposes any change to the frequency of POWTS maintenance.

Priority Issues with this requirement:

1. SPS 383.50 requires Counties to administer a POWTS maintenance program wherein systems are inspected evaluated, maintained and serviced every three years from date of installation or inclusion in the maintenance program. Any change to frequency of maintenance requirements will increase cost to the Counties to administer the maintenance program. Programs will need to be redesigned to separate pumping from inspections. The proposed annual inspection language would cause counties to incur significant additional workload costs for which no funding is provided other than to pass on to the property owner.
2. Education for the property owner. The current maintenance schedule is easily explained to the property owner. County staff can show how the math and science of the maintenance program works to the benefit of the property owner to conduct maintenance and expand the life expectancy of a POWTS. The proposed annual maintenance revision is not based on any science or studies that support a benefit to POWTS life expectancy or protection of the environment.
3. Cost to the property owner. Many of the POWTS that only receive an inspection are seasonal or vacant residences. Use even over a six-year period may not be enough to require pumping. Using this model let us take a look at the cost breakdown.
 - a. We will use an average cost of pumping to be \$200 and average inspection cost to be \$100.
 - b. Property owner that has their POWTS pumped twice over that six-year period would pay approximately \$400.
 - c. Property owner that had their POWTS inspected five times and pumped once over the same six-year period would pay approximately \$700.
 - d. If the intent of the maintenance program is to ensure POWTS are maintained at a reasonable cost then the current program is working. The proposed rule change will drive costs higher (approximately 2.5 times more) and make enforcement more difficult.

4. Primary complaints that County staff forward to WCCA are that maintenance is required even on a three-year cycle. As shown above, not all properties need to be pumped every three years. It is fair to say that a property could be at 32% sludge and scum at the time of inspection and not technically be required to be pumped, as the current requirement is 33% or greater. This then becomes a matter of the service provider educating the property owner on the pros and cons between maintenance and pumping. County staff has not informed WCCA of any complaints from property owners that had their POWTS maintained but not pumped about the POWTS not functioning properly.

5. Number of service providers. Another frequent complaint that County staff receive from property owners is that the pumper or the POWTS maintainer has a long list before they will be able to get to their property. Adding frequency to this will only cause a greater shortage of service providers and drive down the quality of service, not the other way around.

6. Status quo. Current code supports a credentialed individual to determine need to pump a tank versus inspection. Service providers are provided with latitude to recommend what they deem best for the POWTS owner. For example, a credentialed pumper has the ability to inspect without pumping or recommend pumping at a higher frequency based on use characteristics of the POWTS being serviced. A sludge judge fits just as easily on a pump truck as it does in the back of a pick-up truck.

7. Quality across industries. Much of the justification of this rule revision is based on the allegation that credentialed POWTS Maintainers differ from licensed pumpers in the quality of service provided. However, mistakes happen, and quality varies from individual to individual across every industry. It is likely that a focus on education and enforcement of standards by DSPS, the DNR, and the industry will yield a greater solution to any perceived problems with less financial and functional impact on Wisconsin taxpayers.

- a. Are tighter restrictions on credentialing or licensing required?
- b. DSPS conducts audits of Counties every year. Is an audit program needed for service providers?
- c. Would a change to the definition of a POWTS maintainer work?

Thank you for the opportunity to comment on this very important matter. If you would like to discuss this matter further please contact me at the number and email address listed below.

Respectfully,

Kenneth Thiele
WCCA President
Senior Zoning & Sanitary Specialist
Columbia County
608-742-9660
Kenneth.thiele@columbiacountywi.gov”

Effect on small business:

These proposed rules do not have an economic impact on small businesses, as defined in s. 227.114 (1), Stats. The Department’s Regulatory Review Coordinator may be contacted by email at Jennifer.garrett@wisconsin.gov, or by calling (608) 266-2112.

Agency contact person:

Jake Pelegrin, Administrative Rules Coordinator, Department of Safety and Professional Services, Office of Chief Legal Counsel, email at DSPSAdminRules@wisconsin.gov.

Place where comments are to be submitted and deadline for submission:

Comments may be submitted to Jake Pelegrin, Administrative Rules Coordinator, Department of Safety and Professional Services, Office of Chief Legal Counsel, 4822 Madison Yards Way, P.O. Box 14497, Madison, Wisconsin 53708-0497, or by email to DSPSAdminRules@wisconsin.gov. Comments must be received at or before the public hearing, scheduled for March 6, 2026, to be included in the record of rule-making proceedings.

TEXT OF RULE

SECTION 1. SPS 325.01 is repealed and recreated to read:

SPS 325.01 Plumbing Standard. All plumbing design, construction, installation, materials, and inspection used in the construction of one- and 2-family dwellings shall comply with the requirements of the Wisconsin Plumbing Code, chs. SPS 381 to 387.

SECTION 2. SPS 381.01 (8m) is created to read:

SPS 381.01 (8m) "Anti-siphon fill valve" means a valve that is used to supply water for flush tank refill and, where applicable, trap reseal. The device has an air gap, integral mechanical backflow preventer, or vacuum breaker to prevent the backflow of water from the flush tank into the supply system. The device is operated by a float or similar activation method.

SECTION 3. SPS 381.01 (22) is repealed.

SECTION 4. SPS 381.01 (50a) is created to read:

SPS 381.01 (50a) “Campground” has the meaning given in s. ATCP 79.03 (3).

Note: Section ATCP 79.03 (3) reads: “Campground” means a parcel or tract of land owned by a person, state, or local government that is designed, maintained, intended, or used for the purpose of providing campsites offered with or without charge, for temporary overnight sleeping accommodations.

SECTION 5. SPS 381.01 (50c) and (50e) (intro.) are amended to read:

SPS 381.01 (50c) “Campground or recreational vehicle park drain system, sanitary” means ~~all piping or any portion thereof~~ a sanitary sewer, within public or private premises, ~~that conveys domestic wastewater from~~ serving a campground or recreational vehicle park.

(50e) “Campground or recreational vehicle park drain system, storm” means ~~all plumbing or any portion thereof~~ a storm sewer, within public or private premises, ~~that conveys any of the following:~~ serving a campground or recreational vehicle park.

SECTION 6. SPS 381.01 (50e) (a) and (b) and (c) are repealed.

SECTION 7. SPS 381.01 (50w) and (51m) are created to read:

SPS 381.01 (50w) "Campsite" has the meaning given in s. ATCP 79.03 (7).

Note: Section ATCP 79.03 (7) reads: “Campsite” means an area of a campground that is designated by the operator as capable of accommodating an independent or dependent camping unit. A campsite may be one or a combination of the following: (a) Individual campsite. (b) Group campsite. (c) Seasonal campsite. (d) Rustic campsite.

(51m) "Campsite water supply riser" means the vertical water supply piping and faucet that provides potable water to an individual camp site.

SECTION 8. SPS 381.01 (65m) and (80) are amended to read:

SPS 381.01 (65m) “Cross connection control assembly” means a mechanical backflow preventer used to prevent backflow into a water supply system that requires shut-off valves and a test cock or test cocks to meet any specific standard, such as a reduced pressure principle backflow ~~preventer~~ prevention assembly, a double check backflow ~~preventer~~ prevention assembly, a pressure vacuum breaker assembly, or a spill resistant vacuum breaker assembly.

(80) “Double check detector ~~fire protection~~ backflow ~~preventer assembly~~ prevention assembly” means an assembly ~~serving a fire protection system and~~ consisting of 2 independently acting check valves, internally forced loaded to a normally closed position, 2 tightly closing shut-off valves, and properly located test cocks which also includes a parallel bypass with a flow meter to indicate leakage or unauthorized use of water downstream of the assembly. The bypass shall be composed of a water meter and a meter-sized approved double check valve prevention assembly. The meter shall register accurately for only very low rates of flow and shall show a registration for all rates of flow.

SECTION 9. SPS 381.01 (80m) is repealed.

SECTION 10. SPS 381.01 (82), (116), and (117m) are amended to read:

SPS 381.01 (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 a public sewer systems or system, a private onsite wastewater treatment system, or a public sewage treatment or disposal plant.

(116) “Health care facility” means a hospital, nursing home, community-based residential facility, inpatient hospice, or ambulatory surgery center.

(117m) “Health care related facility” means an assisted living, residential care apartment complex, memory care, infirmary, inpatient mental health center, ~~inpatient hospice~~, adult day care center, renal dialysis center, facility for the developmentally disabled, institute for mental disease, urgent care center, medical clinic or office, dental clinic or office, residential care center for children and youth, or school of medicine, surgery, or dentistry.

SECTION 11. SPS 381.01 (141) is repealed and recreated to read:

SPS 381.01 (141) “Lead-free” means:

(a) Not containing more than 0.2 percent lead when used with respect to solder and flux; and

(b) Not more than a weighted average of 0.25 percent lead when used with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.

Note: Requirements for calculation of lead content may be found in s. SPS 384.30 (1m) (d).

SECTION 12. SPS 381.01 (152) is amended to read:

SPS 381.01 (152) “Manufactured home drain connector” means ~~the pipe that joins the drain piping for a portion of a drain system under a manufactured home to the building sewer without a permanent foundation where a drain connector joins the drain piping installed by the manufacturer to the sanitary sewer.~~

SECTION 13. SPS 381.01 (152) (Note) is created to read:

SPS 381.01 (152) Note: Drain piping installed under a manufactured home with a permanent foundation is within or under the fully enclosed portion of a building, and is therefore a building drain under the definition in s. SPS 381.01 (39).

SECTION 14. SPS 381.01 (153e) and (153m) (intro.) are amended to read:

SPS 381.01 (153e) “Manufactured home community drain system, sanitary” means ~~all piping or any portion thereof~~ a sanitary sewer, within public or private premises, ~~which conveys domestic wastewater from a manufactured home in~~ servicing a manufactured home community.

(153m) “Manufactured home community drain system, storm” means ~~all piping or any portion thereof~~ a storm sewer, within public or private premises, ~~that conveys any of the following:~~ servicing a manufactured home community.

SECTION 15. SPS 381.01 (153m) (a) and (b) and (c) are repealed.

SECTION 16. SPS 381.01 (153s) is amended to read:

SPS 381.01 (153s) “Manufactured home community water supply system” means ~~the piping a~~ water supply system through which potable water is conveyed to points of connection to a manufactured home or homes in a manufactured home community.

SECTION 17. SPS 381.01 (153w), (201g), and (201r) are created to read:

SPS 381.01 (153w) "Manufactured home water connector" means the portion of a water supply system under a manufactured home and downstream of the building control valve that joins the water inlet(s) installed by the manufacturer prior to delivery to the water service or the manufactured home community water supply system.

(201g) “Recreational vehicle” has the meaning given in s. 340.01 (48r), Stats.

Note: Section 340.01 (48r), Stats., reads: “Recreational vehicle” means a vehicle that is designed to be towed upon a highway by a motor vehicle, that is equipped and used, or intended to be used, primarily for temporary or recreational human habitation, and that does not exceed 46 feet in length. “Recreational vehicle” includes a camping trailer, 5th-wheel recreational vehicle, park model recreational vehicle, as defined in s. 218.10 (7m), Stats., and travel trailer, as defined in s. 218.10 (8v), Stats.

(201r) "Recreational vehicle park" means a plot of land upon which 2 or more recreational vehicle sites are located, established or maintained for occupancy by recreational vehicles of the general public as temporary living quarters for recreation or vacation purposes.

SECTION 18. SPS 381.01 (203) is amended to read:

SPS 381.01 (203) “Reduced pressure detector ~~fire protection~~ backflow prevention assembly” means a type of reduced pressure principle type backflow ~~preventer serving a fire protection system and prevention assembly~~ which includes a parallel bypass with a flow meter to indicate leakage or unauthorized use of water downstream of the assembly. The bypass shall be composed of a water meter and a meter-sized approved reduced pressure principle backflow prevention assembly. The meter shall register accurately for only very low rates and shall show a registration for all rates of flow.

SECTION 19. SPS 381.01 (203m) is repealed.

SECTION 20. SPS 381.01 (204), (231m), and (284) are amended to read:

SPS 381.01 (204) “Reduced pressure principle backflow ~~preventer~~ prevention assembly” means a cross connection control assembly consisting of 2 independently-acting check valves, internally force-loaded to a normally closed position and separated by an intermediate chamber or zone in which there is a hydraulically operated relief means for venting to atmosphere, internally force-loaded to a normally open position. These assemblies are designed to operate under continuous pressure conditions. The assembly shall include 2 properly located, tightly closing shut-off valves and properly located test cocks.

(231m) “Spill resistant vacuum breaker assembly” means a cross connection control assembly consisting of one check valve force-loaded closed and an air inlet force loaded open to atmosphere located downstream of the check valve. The assembly also includes 2 tightly closing shut-off valves and 2 test cocks or a no. 1 test cock and a bleed valve.

(284) “Water supply system” means the piping of a private water main, water service, ~~and~~ water distribution system, manufactured home community water supply system, and campground or recreational vehicle park water supply 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.

SECTION 21. SPS Table 381.20-3a is created to read:

Table 381.20-3a

ISEA	International Safety Equipment Association 1101 Wilson Blvd, Suite #1425 Arlington, VA, 22209-1762 Phone: 703-525-1695 Website: www.safetyequipment.org
Standard Reference Number	Title
1. ANSI/ISEA Z358.1-2014 (R2020)	American National Standard for Emergency Eyewash and Shower Equipment

SECTION 22. SPS Table 381.20-3e, Table 381.20-4, Table 381.20-5, Table 381.20-12, and Table 381.20-13 are amended to read:

Table 381.20-3e (Partial)

ASME	American Society of Mechanical Engineers Two Park Avenue New York, New York 10016-5990 Phone: 800-843-2763 Website: www.asme.org
Standard Reference Number	Title
22. A112.19.4M-1994 (R2009)	Porcelain Enameled Formed Steel Plumbing Fixtures
37m. B16.28-1994	Wrought Steel Butt welding Short Radius Elbows and Returns

Table 381.20-4 (Complete Table)

ASSE/IAMPO	American Society of Sanitary Engineering 18927 Hickory Creek Drive, Suite 220 Mokena, Illinois 60448
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Standard Reference Number	Title
1. 1001-2021	Atmospheric Type Vacuum Breakers
2. ASSE 1002-2020/ASME A112.1002-2020/CSA B125.12.20	Anti-siphon <u>Anti-Siphon</u> Fill Valves for Water Closet Tanks
3. 1003-2020 e1	Water Pressure Reducing Valves for Potable Water Distribution Systems
4. 1004-2017	<u>Backflow Prevention Requirements for Commercial Dishwashing Machines</u>
5. 1006-1989	Residential Use (Household) Dishwashers
6. 1007-1992	Home Laundry Equipment
7. 1008-2020	Plumbing Aspects of Residential Food Waste Disposer Units
8. 1009-1990	Commercial Food Waste Grinder Units
9. 1010-2004	Water Hammer Arresters
10. 1011-2017	Hose Connection Vacuum Breakers
11. 1012-2021	Backflow Preventer <u>Preventers</u> with <u>an</u> Intermediate Atmospheric Vent
12. 1013-2021	Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Backflow Preventers <u>Prevention Assemblies</u>
13. 1014-2020	Backflow Prevention Devices for Hand Held <u>Hand-held</u> Showers
14. 1015-2021	Double Check Backflow Prevention Assemblies and Double Check Fire Protection Backflow Prevention Assemblies
15. ASSE 1016-2017/ASME A112.1016-2017/CSA B125.16-17	Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations
16. 1017-2009	Temperature Actuated Mixing Valves for Hot Water Distribution Systems
17. 1018-2001 (R2021)	Trap Seal Primer Valves - Potable Water Supplied
18. 1019-2011 (R2016)	Wall Hydrant with Backflow Protection and Freeze Resistance
19. 1020-2020 e1	Pressure Vacuum Breaker Assembly <u>Assemblies</u>
20. 1022-2021	Backflow Preventer for Beverage Dispensing Equipment
21. 1023-2020	Hot Water Dispensers, Household Storage Type, Electrical

- Electrically Heated or Cooled Water Dispensers
22. 1024-2017
(R2021) Dual Check Backflow Preventers
23. 1032-2004
(R2021) Dual Check Valve Type Backflow Preventers for Carbonated Beverage Dispensers, Post-Mix Type
24. 1035-2020 Laboratory Faucet Backflow Preventers
25. 1037-
2015/ASME
A112.1037-
2015/CSA
B125.37-15
(R2020) Pressurized Flushing Devices for Plumbing Fixtures
26. 1044-2015 Trap Seal Primer – Drainage Types and Electric Design Types
27. 1047-2021 Reduced Pressure Detector ~~Fire Protection~~ Backflow Prevention Assemblies, ~~Performance Requirements for~~
28. 1048-2021 Double Check Detector ~~Fire Protection~~ Backflow Prevention Assemblies, ~~Performance Requirements for~~
29. 1050-2021 Stack Air Admittance Valves for Sanitary Drainage ~~Systems~~
30. 1051-2021 Individual and Branch Type Air Admittance Valves for Sanitary Drainage Systems
31. 1052-2016 Hose Connection Backflow Preventers, ~~Performance Requirements for~~
32. 1053-2019 Dual Check Backflow Preventer Wall Hydrants - Freeze Resistant Type, ~~Performance Requirements for~~
33. ANSI/CAN/
ASSE/
IAPMO
1055-2020 Chemical ~~Dispensing Systems~~ Dispensers with Integral Backflow Protection, ~~Performance Requirements for~~
34. 1056-2013
(R2021) Spill Resistant Vacuum Breaker Assemblies, ~~Performance Requirements for~~
35. 1057-2012 Freeze Resistant Sanitary Yard Hydrants with Backflow Protection, ~~Performance Requirements for~~
36. 1061-2020 ~~Performance Requirements for~~ Push-Fit Fittings
37. 1066-1997 Individual Pressure Balancing In-Line Valves for Individual Fixture Fittings
- 37g. 1069-2020
(R2025) Automatic Temperature Control Mixing Valves
- 37r. ASSE
1070/ASME
A112.1070/
CSA
B125.70-
2020 Water Temperature Limiting Devices
38. 1072-2020 ~~Performance Requirements for~~ Barrier Type Trap Seal Protection for Floor Drains

39.	1079-2012 (R2021)	Performance Requirements for Dielectric Pipe Unions
40.	1081-2014 (R2020)	Performance Requirements for Backflow Preventers with Integral Pressure Reducing Boiler Feed Valve and Intermediate Atmospheric Vent Style for Domestic and Light Commercial Water Distribution Systems
41.	ASSE/IAPMO/ANSI SERIES 5000-2022e1	Cross Connection Control Professional Qualifications
42.	IAPMO/ANSI Z1001-2016	(Prefabricated Prefabricated Gravity Grease Interceptors) <u>Interceptors</u>

Table 381.20-5 (Partial)

ASTM
ASTM International
100 Barr Harbor Drive
West Conshohocken, Pennsylvania 19428-2959
Phone: (610) 832-9500
Website: www.astm.org

	Standard Reference Number	Title
48.	C1478-20 <u>C1478/C1478M-20</u>	Standard Specification for Storm Drain Resilient Connectors Between Reinforced Concrete Storm Sewer Structures, Pipes and Laterals
<u>76m.</u>	<u>D3139-19</u>	<u>Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals</u>
<u>153.</u>	<u>F3430-25</u>	<u>Standard Specification for Closed-Cell Cellular Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers</u>

Table 381.20-12 (Partial)

STI/SPFA
Steel Tank Institute/Steel Plate Fabricators Association
944 Donata Court
Lake Zurich, Illinois 60047
Phone: 847-438-8265
Website: www.steeltank.com

	Standard Reference Number	Title
STI-P	STI/SPFA	External Corrosion Protection of Underground Steel Storage Tanks, Specifications and Manual for
	STI-P3-2018	

Table 381.20-13 (Partial)

UL

Underwriters Laboratories Inc.
333 Pfingsten Road
Northbrook, Illinois 60062
Phone: 847-272-8800
Website: www.ul.com

Standard Reference Number	Title
<u>2m.</u>	<u>Standard 499-2025</u>

SECTION 23. SPS 382.20 (1) (c), Table 382.20-1, (4) (d) 1. a., and (13) (e) are amended to read:

SPS 382.20 (1) (c) *Cross connection control assembly registration.* The installation of each reduced pressure principle backflow ~~preventer~~ prevention assembly, reduced pressure detector backflow prevention assembly, spill resistant vacuum breaker assembly, double check backflow prevention assembly, double check detector backflow prevention assembly, or pressure vacuum breaker assembly shall be registered with the department no later than 7 days after installation of the assembly. Assemblies serving automatic fire sprinkler systems are not required to be registered with the department.

Table 382.20-1 (Partial) Submittals to Department

Types of Plumbing Installation

5. Reduced pressure principle backflow ~~preventers~~ prevention assemblies, reduced pressure detector backflow prevention assemblies, double check backflow prevention assemblies, double check detector backflow prevention assemblies, pressure vacuum breaker assemblies, and spill resistant vacuum ~~breakers~~ breaker assemblies serving health care facilities. Assemblies serving automatic fire sprinkler systems are not required to be registered with the department.

(4) (d) 1. a. At least ~~2 sets~~ one set of plans signed in accordance with par. ~~(d) (c)~~ and detailing the system installation for each site.

(13) (e) Upon permanent removal or replacement of any reduced pressure principle backflow ~~preventer~~ prevention assembly, reduced pressure detector backflow prevention assembly, double check backflow prevention assembly, double check detector backflow prevention assembly, spill resistant vacuum breaker assembly or pressure vacuum breaker assembly, the owner shall notify the department in writing using a format acceptable to the department. Removal or replacement of an assembly serving an automatic fire sprinkler system that is not registered with the department is not required to be reported to the department.

SECTION 24. SPS 382.22 (2) (b) is amended to read:

SPS 382.22 (2) (b) When a hazard to life, health or property exists or is created by an existing system, the system shall be repaired or replaced. Alternatively, the authority having jurisdiction may require that the system shall be repaired or replaced be brought into compliance with the current code's requirements within a time period determined by the authority.

SECTION 25. SPS Table 382.22-1 is repealed and recreated to read:

**Table 382.22-1
Testing and Submitting Requirements for Cross Connection Control Assemblies**

ASSE Standard Name and Number	CAN/CSA Standard Name and Number	ASSE Test Standard Number and Test Required	Test Results to be Submitted to Department (For non-fire suppression system applications)	Test Results to be Submitted to Department (For fire suppression system applications)
Double Check Backflow Prevention Assemblies ASSE 1015	Double Check Valve Backflow Preventers CAN/CSA B64.5	5015	Yes	No
Double Check Detector Backflow Prevention Assemblies ASSE 1048	Not Applicable	5048	Yes	No
Pressure Vacuum Breaker Assemblies ASSE 1020	Pressure Vacuum Breakers CAN/CSA B64.1.2	5020	Yes	Not Applicable
Reduced Pressure Principle Backflow	Reduced Pressure Principle Backflow	5013	Yes	No

Prevention Assemblies ASSE 1013	Preventers CAN/CSA B64.4			
Reduced Pressure Detector Backflow Prevention Assemblies ASSE 1047	Not Applicable	5047	Yes	No
Spill Resistant Vacuum Breaker Assemblies ASSE 1056	Spill Resistant Vacuum Breakers CAN/CSA B64.1.3	5056	Yes	Not Applicable

SECTION 26. SPS 382.30 (5) (d) and (e) are created to read:

SPS 382.30 (5) (d) *Campground or recreational vehicle park drain system.* The minimum pitch of piping within a campground or recreational vehicle park drain system shall be in accordance with Table 382.30–3.

(e) *Manufactured home community drain system.* The minimum pitch of piping within a manufactured home community drain system shall be in accordance with Table 382.30–3.

SECTION 27. SPS 382.30 (10) (c) (intro.) is amended to read:

SPS 382.30 (10) (c) *Prefabricated pump and sump systems.* Macerating toilet systems and waste pumping systems for plumbing fixtures shall conform to ASME ~~A112.3.4 2018/CSA B45.9-18~~ A112.3.4/CSA B45.9. If unspecified by the manufacturer, the minimum capacity of a pump and sump system shall be determined in accordance with all of the following:

SECTION 28. SPS 382.30 (11) (e) 6. is created to read:

SPS 382.30 (11) (e) 6. Polyethylene piping for pressurized building sewers or pressurized private interceptor main sewers 3 inches or larger conforming to ASTM F714 may be installed through directional drilling adhering to ASTM F1962.

Note: Directional drilling under navigable waters shall be in accordance with the department of natural resources under ch. 30, Stats.

SECTION 29. SPS 382.30 (14) (a) 1. is amended to read:

SPS 382.30 (14) (a) 1. Conform to CSA ~~b45.13:19/IAPMO z1700-2019~~ B45.13/IAPMO Z1700.

SECTION 30. SPS 382.30 (15) is created to read:

SPS 382.30 (15) Elevator threshold drains. Elevator emergency threshold drains provided to meet the requirements of International Building Code s. 3007.3 or 3008.3, as adopted and modified by chs. SPS 361 to 366, may be used only to minimize infiltration of water from fire sprinklers into elevator hoistways. Such drains may not receive other water including wastewater. Elevator threshold drains shall comply with all of the following:

(a) In lieu of individual traps, a single trap may serve multiple threshold drains on a single floor serving a single hoistway.

Note: Per SPS 318.1004 (12s), “Hoistway” means a shaft or opening through a building or structure for the travel of elevators, dumbwaiters, or material lifts, extending from the pit floor to a ceiling above.

(b) Where multiple elevator threshold drains are served by one trap, an untrapped threshold drain may serve the cleanout requirements under s. SPS 382.35 (3) (a) and is exempt from s. SPS 382.35 (3) (g).

(c) Discharge shall be as specified in Table 382.38-1, line 4m.

(d) A drain stack serving only threshold drains serving elevator door areas may utilize a combination drain and vent system under s. SPS 382.31 (17) (d).

(e) Elevator threshold drains are exempt from safing requirements under s. SPS 384.20 (4) (b) 9.

(f) The elevator threshold drain stack utilizing a combination drain and vent as permitted by s. SPS 382.31 (17) (d) may not be combined with other plumbing prior to discharging to the building drain or other discharge points.

(g) Elevator threshold drain traps shall comply with s. SPS 382.32 (3) (c) 1.

(h) The drain stack shall be sized to accommodate the anticipated design discharge loads of the automatic fire sprinkler system.

Note: See ch. SPS 382 Appendix for further explanatory material.

SECTION 31. SPS 382.31 (17m) (intro.) and (f) are amended to read:

SPS 382.31 (17m) AIR ADMITTANCE VALVES. The use of air admittance valves ~~in lieu of traditional venting~~ shall comply with all of the following:

(f) AAVs shall be tested. The AAV shall be tested prior to or after installation. The AAV shall be subjected to a pressure equal to 1 inch of water column. After observing for 1 minute, if the pressure falls ~~to~~ 0.5 of an inch or less, it will be considered a passing AAV.

SECTION 32. SPS 382.32 (3) (a) (intro.), 1. and 2. (intro.), and a. and b. are amended to read:

SPS 382.32 (3) (a) Trap exceptions. The plumbing fixtures listed in subds. 1. to ~~3.~~ 5. shall not be required to be separately trapped:

1. Fixtures having integral traps;

2. Compartments of a combination plumbing fixture installed on one trap, provided all of the following apply:

a. No compartment is more than 6" deeper than any other;

b. The distance between the compartments' waste outlets farthest apart does not exceed 30"; ~~and.~~

SECTION 33. SPS 382.32 (3) (a) 3. (Note) is repealed.

SECTION 34. SPS 382.32 (3) (a) 4. and 5. are created to read:

SPS 382.32 (3) (a) 4. A floor drain within a garage attached to a one- or 2-family dwelling that discharges to the ground surface.

5. Local waste piping within a one- or 2-family dwelling having a length of up to 20 feet.

SECTION 35. SPS 382.32 (4) (b) 1., a. and b. and d. are amended to read:

SPS 382.32 (4) (b) 1. 'Vertical distance.' Except as provided in subd. 1. a. to ~~e. d.~~, the vertical distance between the top of the fixture drain outlet and the ~~horizontal center line of the trap outlet~~ shall weir may not exceed 15" 24 inches.

a. The vertical distance between the top of the strainer of a floor drain or the opening of a standpipe receptor and the ~~horizontal center line of the trap outlet~~ weir shall may not exceed 36" inches.

b. The vertical distance between the top of the fixture drain outlet of a pedestal fixture or a cuspidor and the ~~horizontal center line of the trap outlet~~ weir shall may not exceed 60" inches.

d. The vertical distance ~~from~~ between the top of the inlet to the horizontal centerline of the fixture drain opening for a campsite receptor, exterior storm drain inlet, or a receptor for a sanitary dump station to the trap weir may exceed 3 feet so as to permit the trap to be installed below the predicted depth of frost.

SECTION 36. SPS 382.32 (4) (b) 1. e. is repealed.

SECTION 37. SPS 382.33 (5) (b) (Note) is amended to read:

SPS 382.33 (5) (b) Note: Residential One- or 2-family dwelling exclusion see s. SPS ~~325.01 (3)~~ 382.32 (3) (a) 5.

SECTION 38. SPS 382.33 (7) (a) 3. and (9) (fm) are repealed.

SECTION 39. SPS 382.33 (9) (g) 1. is amended to read:

SPS 382.33 (9) (g) 1. 'Bar and soda fountain sinks.' A bar sink, whether installed for hand washing or other use, or a soda fountain sink may discharge ~~to the sanitary drain system~~ through indirect waste piping. Bar and soda fountain sinks shall discharge to the sanitary drain system.

SECTION 40. SPS 382.34 (4) (c) (Note) is repealed.

SECTION 41. SPS 382.34 (5) (d) 4. is amended to read:

SPS 382.34 (5) (d) 4. 'Flow controls.' Where required by the manufacturer, devices which control the rate of flow through an interior grease ~~intercept~~ interceptor shall be installed.

SECTION 42. SPS 382.34 (15) (g) is repealed.

SECTION 43. SPS 382.35 (3) (k) is amended to read:

SPS 382.35 (3) (k) Conductors. Where a cleanout is provided in a conductor, the cleanout shall be located ~~28 to~~ not more than 60" 60 inches above the lowest floor penetrated by the conductor.

SECTION 44. SPS Table 382.36-1 (Title) is amended to read:

**SPS Table 382.36-1
Maximum Capacity of Stormwater Conveyance Piping for
PVC, ASTM D1785, D2665, F891 and ABS, ASTM ~~D1527, D2661, F628~~**

SECTION 45. SPS Table 382.36-3 is amended to read:

Table 382.36-3 (Partial) Maximum Capacity of Stormwater Conveyance Piping for Cast Iron, ASTM A74 and ASTM A888						
Nominal Pipe Size (in inches)	Maximum Capacities in Gallons Per Minute (gpm)					
	Pitch of Piping Per Foot					
	1/32 inch (0.16% slope)	1/16 inch (0.52% slope)	1/8 inch (1.04% slope)	1/4 inch (2.08% slope)	1/2 inch (2.08% slope)	Vertical
2	N/A	N/A <u>10</u>	N/A <u>14</u>	N/A <u>20</u>	N/A <u>28</u>	26 ^a

SECTION 46. SPS 382.36 (7) (d) 1m., (e), and (8) (b) 3. are amended to read:

SPS 382.36 (7) (d) 1m. If ~~in direct connection~~ connecting indirectly and at finished grade, a removable strainer shall protect the inlet. The capacity of the strainer shall be provided in accordance with sub. (9) (b).

(e) *Hydrodynamic stormwater separators.* Hydrodynamic stormwater separators shall conform to ASTM ~~F1745/F1745m~~ C1745/C1745M.

(8) (b) 3. 'Clearwater discharge.' Clearwater may not discharge into a stormwater sump, except for one- and 2-family dwellings and sumps located in elevator hoistways.

SECTION 47. SPS 382.36 (8) (b) 3. (Note) is created to read:

SPS 382.36 (8) (b) 3. Note: All drains located in elevator hoistways must comply with the requirements of s. SPS 382.33 (9) (f).

SECTION 48. SPS 382.37 (Title), (3) (Title), (a) (intro.), and 3. and 6. are amended to read:

SPS 382.37 Sanitation facilities, and campgrounds, and recreational vehicle parks.

(3) CAMPGROUNDS AND RECREATIONAL VEHICLE PARKS.

(a) ~~Drain~~ Sanitary drain systems. Sewers Sanitary sewers serving campgrounds and recreational vehicle parks shall comply with the provisions applicable to building sewers in s. SPS 382.30 and all of the following:

3. Where 2 or more drain lines are designed to discharge into the same campsite receptor, an increaser shall be installed in the vertical portion of the ~~trap riser~~ standpipe to accommodate the drains.

6. A vent is not required to serve the trap ~~servng~~ of a campsite receptor.

SECTION 49. SPS 382.37 (3) (a) 8. to 11. are created to read:

SPS 382.37 (3) (a) 8. The sanitary drain system shall be constructed of materials suitable for sanitary building sewer pipe, as specified in s. SPS 384.30 (2) (c).

9. Cleanouts shall be provided to comply with s. SPS 382.35, suitable for sanitary building sewers. Additionally, a cleanout shall be provided upstream of the point where more than one campsite receptor is served by a single drain.

10. A means to locate buried non-metallic campground or recreational vehicle park drain systems, sanitary, that discharge to municipal mains shall be provided in accordance with the options under s. SPS 382.30 (11) (h).

11. Testing and inspection shall be conducted to comply with s. SPS 382.21, suitable for sanitary building sewer and sanitary private interceptor main sewer.

SECTION 50. SPS 382.37 (3) (b) 1. is amended to read:

SPS 382.37 (3) (b) 1. An accessible control valve shall be installed at the most upstream point of the campground or recreational vehicle park water supply ~~distribution~~ system and downstream of

the municipal meter or pressure tank.

SECTION 51. SPS 382.37 (3) (b) 7. and 8. and 9. are created to read:

SPS 382.37 (3) (b) 7. Testing and inspection shall be conducted to comply with s. SPS 382.21, suitable for private water mains and water services.

8. A means to locate buried non-metallic campground or recreational vehicle park water supply system connected to municipal supply systems shall be provided in accordance with s. SPS 382.40 (8) (k).

9. The water supply system shall be designed for periodic flushing at a minimum velocity of 3 feet per second per ANSI/AWWA Standard C651, Table 3.

SECTION 52. SPS 382.40 (3) (b) 1. c. is created to read:

SPS 382.40 (3) (b) 1. c. Tempered water supplied to serve individual lavatories, wash fountains and shower heads shall be provided by means of temperature-actuated mixing valves installed at the point of use that comply with ASSE 1070.

SECTION 53. SPS 382.40 (3) (b) (intro.), (c) 4. and (d) 4. are amended to read:

SPS 382.40 (3) (b) *Hot water required.* Except as provided in subds. 1. ~~and 2.~~ to 3., hot water shall be provided to all plumbing fixtures, appliances, and equipment used for personal washing, culinary purposes, or laundering, and sinks used for building maintenance in a public building.

(c) 4. As used in this section, "closed water system" means a system provided with a check valve, backflow preventer, or other normally closed device that prevents dissipation of building pressure back into the water supply system. The water supply system shall be protected from thermal expansion when a closed water system is created. Any water heater, except for an instantaneous non-storage water heater, serving a closed water system shall be provided with an expansion tank or other approved device having a similar function to control thermal expansion.

(d) 4. The installation of each reduced pressure principle backflow ~~preventer~~ prevention assembly, reduced pressure detector backflow prevention assembly, double check backflow prevention assembly, double check detector backflow prevention assembly, spill resistant vacuum breaker assembly and pressure vacuum breaker assembly shall display a department assigned identification number. Assemblies serving automatic fire sprinkler systems are not required to be registered with the department or display a department assigned identification number.

SECTION 54. SPS 382.40 (3) (f) is created to read:

SPS 382.40 (3) (f) *Check valve required.* All systems that circulate water by means of a pump or other mechanical device or method shall have a check valve or equal device installed so as to ensure the direction of flow.

SECTION 55. SPS 382.40 (4) (c) 1. d. and (5) (a) are amended to read:

SPS 382.40 (4) (c) 1. d. The water distribution system for buildings with more than 4 dwelling units or living units shall be provided with control valves in such numbers and at such locations so that the water supplied to all the units within the building can be isolated into groups of 4 ~~or~~ or less units.

(5) (a) General. Water heating systems shall be sized to provide sufficient hot water to supply peak demand, ~~except for a tankless type water heater that meets the requirements of par. (am).~~

SECTION 56. SPS 382.40 (5) (am) is repealed.

SECTION 57. SPS 382.40 (6) (a), (c) 1. to 3., 4. a., (7), and (Note 1) are amended to read:

SPS 382.40 (6) (a) Intermittent flow fixtures. The load factor for intermittent flow fixtures on water supply piping shall be computed in terms of water supply fixture units as specified in Tables ~~382.40-1~~ 382.40-1b and 382.40-2 for the corresponding fixture and use. Water supply fixture units may be converted to gallons per minute in accordance with Table 382.40-3 or 382.40-3e.

(c) 1. The minimum flow rate of a water heater may be obtained by multiplying 0.65 by the calculated hot water gallons per minute demand ~~calculated in accordance with as determined by Table Tables 382.40-1b by a factor of 0.65 and 382.40-3.~~

2. The flow rate for a storage tank type water heater may be calculated based on a 70% usable storage plus the recovery rate and a ~~10~~ 10-minute minimum draw time.

3. The flow rate for ~~tankless type~~ instantaneous water heaters shall be based on a temperature increase that will provide 110°F at the ~~most remote terminus~~ terminal fixture or faucet.

4. a. Water heaters serving high flow fixtures, hose ~~bibs~~ bibbs, hydrants or fixtures requiring 1/2 inch or larger supply piping. High flow fixtures are fixtures with flow rates greater than 4 gpm at 80 psig and a water velocity less than or equal to 8 feet per second.

(7) SIZING OF THE WATER SUPPLY PIPING. The sizing of the water supply system shall be based on the empirical method and limitations outlined in this subsection, an approved alternate standard per s. SPS 381.20 (2), or an analysis provided by a Wisconsin master plumber, registered architect, registered professional engineer or permitted designer of engineering systems – plumbing.

Note 1: See ~~appendix~~ public lookup, <https://esla.wi.gov/publiclookup> for details for alternative methods for sizing of the water supply piping ~~of one and 2 family and apartment buildings.~~

SECTION 58. SPS 382.40 (7) (Note 2) and (Note 3) are created to read:

SPS 382.40 (7) Note 2: An approved alternate standard (e. g. International Association of Plumbing and Mechanical Officials Peak Water Demand Calculator) may be utilized separately or in combination with the empirical method, so long as it conforms to good engineering practice standards and product manufacturers specifications.

Note 3: A system based on an analysis provided by a Wisconsin master plumber, registered architect, registered professional engineer, or permitted designer of engineering system-plumbing is an example of an engineered system as defined in s. SPS 381.01 (89). Pursuant to Table SPS 382.20-1, engineered systems may only be evaluated by the department.

SECTION 59. SPS 382.40 (7) (c) and (e) and (g) are amended to read:

SPS 382.40 (7) (c) *Maximum loading.* The calculated load on any portion of the water distribution system may not exceed the limits specified in Tables 382.40-4 to ~~382.40-9~~ 382.40-15.

(e) *Maximum velocity.* A water distribution system shall be designed so that the flow velocity does not exceed 8 feet per second except for a ~~combination-sprinkler-distribution~~ multipurpose piping system as designed in sub. (3) (e).

(g) *Minimum sizes for fixture supplies.* Except as provided in subds. 1. to ~~3.~~ 4., the fixture supplies serving all plumbing fixtures, appliances and pieces of equipment shall be at least 1/2" in diameter.

SECTION 60. SPS 382.40 (7) (g) 4. is repealed and recreated to read:

SPS 382.40 (7) (g) 4. Fixture supplies with a maximum load factor of 0.5 water supply fixture units and a developed length of 25 feet or less shall have a minimum 1/4 inch diameter.

SECTION 61. SPS 382.40 (8) (b) 10. is amended to read:

SPS 382.40 (8) (b) 10. Private water mains shall be ~~provided with provisions for flushing of the system at a minimum of 10 feet per second until clear~~ designed for periodic flushing at a minimum velocity of 3 feet per second per ANSI/AWWA Standard C651, Table 3.

SECTION 62. SPS 382.40 (8) (b) 10. (Note) is repealed.

SECTION 63. SPS 382.40 (8) (b) 11. is created to read:

SPS 382.40 (8) (b) 11. Water service or private water main polyethylene piping conforming to ASTM D3035 may be installed through directional drilling adhering to ASTM F1962.

Note: Directional drilling under navigable waters shall be in accordance with the department of natural resources under ch. 30, Stats.

SECTION 64. SPS 382.40 (8) (d) 3. b. and (i) 3. (Note) are repealed.

SECTION 65. SPS 382.40 (8) (L) is created to read:

SPS 382.40 (8) (L) *Vacuum relief.* A vacuum relief valve shall be installed in each water treatment appliance which, when measured from the bottom of the appliance, is located more than 20 feet above any faucet or outlet served by the appliance. Relief valves shall conform to ANSI Z21.22/CSA 4.4.

SECTION 66. SPS 382.41 (3) (a) 1., (b) 3. a., and 6. b. are amended to read:

SPS 382.41 (3) (a) 1. Water supply systems shall be protected against contamination due to cross connections or backflow conditions by one of the methods, ~~or devices, or assemblies~~ specified in Table 382.41-1 depending upon the situation ~~or Table 382.41-2 depending upon the specific application or use,~~ and the limitations specified in sub. (4).

(b) 3. a. ~~Any~~ Except as provided in subd. 8., any part of the drain system; and

6. b. Cross connection control ~~devices~~ assemblies used in conjunction with automatic fire sprinkler systems shall be listed by an acceptable testing agency for such an application under the standards governing the design and installation of automatic fire sprinkler systems.

SECTION 67. SPS 382.41 (3) (b) 8. is created to read:

SPS 382.41 (3) (b) 8. A cross connection situation shall not be considered to exist for an emergency fixture unless the outlet can be submerged in a plumbing fixture. A low hazard cross connection situation shall be considered to exist when the outlet of an emergency fixture can be submerged.

SECTION 68. SPS 382.41 (3) (c) 1. (intro.) and 2. and 3. are amended to read:

SPS 382.41 (3) (c) 1. For sewerage treatment facilities which are required to conform with ch. NR 110, in addition to the cross connection control required for each potable water usage or water outlet, a reduced pressure principle backflow ~~preventer~~ prevention assembly or a reduced pressure detector backflow prevention assembly shall be installed:

2. For marinas, wharves and docks where potable water outlets are provided to serve boats or ships, in addition to the cross connection control required for each potable water outlet or usage, a reduced pressure principle backflow ~~preventer~~ prevention assembly or a reduced pressure detector backflow prevention assembly shall be installed in the water supply system to limit backflow into the water supply source.

3. The installation of a cross connection control ~~device~~ assembly in the water supply system for a building or structure shall not alleviate the requirement to provide cross connection control for the connection of each plumbing fixture, piece of equipment, appliance or other piping system.

SECTION 69. SPS 382.41 (3) (d) 1. (Note) is created to read:

SPS 382.41 (3) (d) 1. Note: A single wall heat transfer fluid adhering to Category Code HT-1 under the NSF Nonfood Compounds Registration program and 21 CFR part 178.3570 is classified as a non-toxic solution. The NSF Nonfood Compounds Registration Program is a continuation of the USDA product approval and listing program, which is based on meeting regulatory requirements including 21 CFR part 178.3570 for appropriate use, ingredient, and labeling: <https://info.nsf.org/usda/psnc listings.asp>.

SECTION 70. SPS Table 382.41-1 is repealed and recreated to read:

Table 382.41-1	
Methods, Device, or	Situations and Conditions ^c

Assemblies of Cross Connection Control (Standard)	Backpressure				Back Siphonage			
	Low Hazard		High Hazard		Low Hazard		High Hazard	
	Continuous Pressure	Non-continuous Pressure	Continuous Pressure	Non-continuous Pressure	Continuous Pressure	Non-continuous Pressure	Continuous Pressure	Non-continuous Pressure
Air Gaps (ASME A112.1.2)	X	X	X	X	X	X	X	X
Air Gap Fittings (ASME A112.1.3)	X	X	X	X	X	X	X	X
Atmospheric Type Vacuum Breakers (ASSE 1001 or CSA B64.1.1)						X		X
Hose Connection Vacuum Breakers (ASSE 1011 or CSA B64.2)	X ^{a, b}	X ^b	X ^{a, b}	X ^b	X ^a	X	X ^a	X
Hose Connection Vacuum Breakers with Manual Draining Features (CSA B64.2.1)	X ^{a, b}	X ^b	X ^{a, b}	X ^b	X ^a	X	X ^a	X
Hose Connection Vacuum Breakers with Automatic Draining Features (CSA B64.2.2)	X ^{a, b}	X ^b	X ^{a, b}	X ^b	X ^a	X	X ^a	X
Backflow Preventers with an Intermediate Atmospheric Vent (ASSE 1012 or CSA B64.3)	X	X			X	X		
Reduced Pressure Principle Backflow Prevention Assemblies (ASSE 1013 or CSA B64.4)	X	X	X	X	X	X	X	X
Reduced Pressure Principle Backflow Preventers for Fire Protection Systems (CSA B64.4.1)	X	X	X	X	X	X	X	X
Double Check Backflow Prevention Assemblies (ASSE 1015 or CSA B64.5)	X	X			X	X		
Double Check Valve Backflow Preventers for Fire Protection Systems (CSA B64.5.1)	X	X			X	X		
Pressure Vacuum Breaker Assemblies (ASSE 1020 or CSA B64.1.2)					X	X	X	X
Dual Check Backflow Preventers (ASSE 1024 or CSA B64.6)	X	X			X	X		
Reduced Pressure Detector Backflow Prevention Assemblies (ASSE 1047)	X	X	X	X	X	X	X	X
Double Check Detector Backflow Prevention Assemblies (ASSE 1048)	X	X			X	X		
Hose Connection Backflow Preventers (ASSE 1052 or CSA B64.2.1.1)	X ^{a, b}	X ^b	X ^{a, b}	X ^b	X ^a	X	X ^a	X
Spill Resistant Vacuum Breaker Assemblies (ASSE 1056 or CSA B64.1.3)					X	X	X	X
Barometric loop					X	X	X	X
Vacuum breaker tee					X	X	X	X

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- a. Limited to campgrounds and marinas.
 - b. Maximum of 10 feet (3.0 meters) of backpressure.
 - c. Refer to SPS 384 for application specific methods, devices, and assemblies.

SECTION 71. SPS 382.41 (4) (a) and (d) (intro.), (e) 1. to 3., (g) 1. and 3., (i) and (k) (intro.), 2m., (m) and (n) (intro.), and 2. are amended to read:

SPS 382.41 (4) (a) Cross connection control devices or assemblies shall be limited in use in accordance with the respective standard, unless otherwise specifically permitted under this subsection.

(d) A backflow preventer with an intermediate atmospheric vent:

(e) 1. A reduced pressure principle backflow ~~preventer~~ prevention assembly and a reduced pressure detector backflow ~~preventer~~ prevention assembly may not be subjected to a backpressure greater than twice the rated working pressure of the ~~device~~ assembly.

2. A reduced pressure principle backflow ~~preventer~~ prevention assembly and a reduced pressure detector backflow ~~preventer~~ prevention assembly which serve a water-based fire protection system may have a test outlet located between the number 2 check valve and the number 2 listed indicating control valve.

3. A reduced pressure principle backflow ~~preventer~~ prevention assembly and a reduced pressure detector backflow ~~preventer~~ prevention assembly which are 2" or smaller in size and which serve a water-based fire protection system are not required to have a test cock on the number one listed indicating control valve.

(g) 1. A double check backflow prevention assembly and a double check detector ~~assembly~~ backflow ~~preventer~~ prevention assembly may not be subjected to a backpressure greater than twice the rated working pressure of the ~~device~~ assembly.

3. A double check backflow prevention assembly and a double check detector ~~assembly~~ backflow ~~preventer~~ prevention assembly which are 2" or smaller in size and which serve a water-based fire protection system are not required to have a test cock on the number one listed indicating control valve.

(i) A vacuum breaker wall hydrant, freeze resistant automatic draining type, a dual check backflow preventer wall hydrant-freeze resistant type, or a freeze resistant sanitary yard hydrant, may not be employed in backpressure situations of more than 10 feet of water column.

(k) A pressure ~~type~~ vacuum breaker assembly shall be installed such that the bottom of the ~~device~~ assembly or the critical level mark on the ~~device~~ assembly is at least 12" above all of the following:

2m. The highest point downstream from the ~~device~~ assembly where backpressure would be created.

(m) The cross connection control device or assembly to serve a hose bibb or hydrant that penetrates an exterior wall of a heated structure may not prevent a hose bibb or hydrant from being freeze resistant automatic draining as required under s. SPS 382.40 (8) (a).

(n) A spill resistant vacuum breaker assembly shall be installed so that the bottom of the ~~device~~ assembly or the critical level mark on the ~~device~~ assembly is at least 12” above all of the following:

2. The highest point downstream from the ~~device~~ assembly where back pressure would be created.

SECTION 72. SPS 382.41 (4) (o) is repealed.

SECTION 73. SPS 382.41 (5) (c), (d) 2., (e) 1. (intro.), 3. a., (f) (intro.) and (g) are amended to read:

SPS 382.41 (5) (c) Cross connection control devices and assemblies shall be protected from freezing.

(d) 2. A cross connection control device or assembly which has one or more vent ports may not be located in a pit, vault or depression which is below the adjacent grade or floor level, even if the pit, vault or depression is provided with a drain at the bottom of the pit.

(e) 1. Vent ports of cross connection control devices or assemblies shall be positioned:

3. a. If a pressure vacuum breaker assembly, reduced pressure principle backflow ~~preventer~~ prevention assembly, or a reduced pressure detector backflow ~~preventer~~ prevention assembly, is located within a building, a drain or receptor shall be provided to receive the discharge from the vent ports of the ~~device~~ assembly. If a floor drain is to receive the discharge from the vent ports of a pressure vacuum breaker assembly, reduced pressure principle backflow ~~preventer~~ prevention assembly or a reduced pressure detector backflow ~~preventer~~ prevention assembly, the flow or pathway of the discharge may not create a nuisance.

(f) The installation of a reduced pressure principle backflow ~~preventer~~, ~~a reduced pressure principle fire protection backflow preventer prevention assembly~~, a reduced pressure detector ~~fire protection~~ backflow prevention assembly, a double check backflow prevention assembly, ~~a double check fire protection backflow prevention assembly~~, a double check detector fire protection backflow prevention assembly, a pressure vacuum breaker assembly, and a spill resistant vacuum ~~breaker~~ breaker assembly shall conform to all of the following limitations:

(g) The discharge outlet of local waste piping serving a cross connection control device or assembly shall be visible and not be located within a concealed space.

SECTION 74. SPS 382.50 (3) (b) 10. and 11. b. are repealed.

SECTION 75. SPS 382.50 (3) (b) 14. is amended to read:

SPS 382.50 (3) (b) 14. Expansion tanks ~~installed in~~ installing the hot water distribution system shall be of the flow-through type. Where an expansion tank is provided, a check valve shall be provided upstream of the expansion tank. If a bypass and bypass valve are provided for a flow through expansion tank, the bypass valve shall be closed and locked.

SECTION 76. SPS 382.51 (1) and (2) are repealed and recreated to read:

SPS 382.51 (1) SANITARY DRAIN SYSTEMS. Sanitary drain systems serving a manufactured home or manufactured home community shall comply with the provisions applicable to building sewers in s. SPS 382.30 and all of the following:

- (a) The manufactured home drain connector shall have a minimum slope of 1/8 inch per foot.
- (b) The manufactured home drain connector shall be constructed of materials suitable for aboveground drain and vent pipe and tubing as specified in s. SPS 384.30 (2) (a).
- (c) The building sewer, sanitary and manufactured home community drain system, sanitary shall be constructed of materials suitable for sanitary building sewer pipe, as specified in s. SPS 384.30 (2) (c).
- (d) The most upstream point of the building sewer, sanitary or manufactured home community drain system, sanitary shall be determined at its connection with the manufactured home drain connector.
- (e) The building sewer, sanitary or manufactured home community drain system, sanitary shall terminate above the surrounding finished grade.
- (f) Cleanouts shall be provided to comply with s. SPS 382.35, suitable for sanitary building sewers. Additionally, a cleanout shall be provided at the point where more than one manufactured home is served by a single drain.
- (g) A means to locate buried non-metallic manufactured home community drain systems, sanitary, that discharge to municipal mains shall be provided in accordance with the options under s. SPS 382.30 (11) (h).
- (h) Testing and inspection shall be conducted to comply with s. SPS 382.21, suitable for sanitary building sewer and sanitary private interceptor main sewer.

(2) WATER SUPPLY SYSTEMS. Water supply systems serving a manufactured home or a manufactured home community shall comply with s. SPS 382.40 and all of the following:

- (a) For manufactured homes, the most downstream point of the water service or manufactured home community water supply system shall be determined at the connection with the water distribution piping by the manufactured home manufacturer prior to delivery.
- (b) The water service, private water main and manufactured home community water supply system shall be constructed of materials suitable for water services and private water mains as specified in s. SPS 384.30 (4) (d).
- (c) A manufactured home water connector shall be constructed of materials suitable for water distribution piping and tubing as specified in s. SPS 384.30 (4) (e).
- (d) A curb stop shall be provided for an individual manufactured home. The curb stop shall terminate outside the perimeter of the manufactured home.

(e) A building control valve shall be provided on the water service or manufactured home community water supply system a minimum of 6 inches above the surrounding grade.

(f) A means to locate buried non-metallic manufactured home community water supply systems to municipal supply systems shall be provided in accordance with s. SPS 382.40 (8) (k).

(g) The water supply system shall be designed for periodic flushing at a minimum velocity of 3 feet per second per ANSI/AWWA Standard C651, Table 3.

(h) Testing and inspection shall be conducted to comply with s. SPS 382.21, suitable for private water mains and water services.

SECTION 77. SPS 382.51 (3) (a) 1., (b) (intro.), and 1. and 2., are amended to read:

SPS 382.51 (3) (a) 1. Water service and building supply, sanitary sewer connections and storm sewer piping extending up through the ground surface shall be provided with frost sleeves extending to within 6 inches of the top of the below ground horizontal ~~building~~ sewer or water service supply system, or to a depth at least 6 inches below the predicted depth of frost in accordance with Table 382.30-6.

(b) ~~Termination~~ Terminations of the water service building, manufactured home community water supply system, sanitary sewer, manufactured home community drain system, sanitary, storm sewer, and manufactured home community drain system, storm serving a manufactured home shall conform to all of the following:

1. The ~~manufactured home~~ water service for connection to or manufactured home community water supply system serving the manufactured home shall terminate a minimum of 6 inches above the surrounding finished grade.

2. The ~~manufactured home building~~ sanitary sewer for connection to or manufactured home community drain system, sanitary serving the manufactured home shall terminate a minimum of 4 inches above the surrounding finished grade and may not terminate higher than the water service termination or manufactured home water supply system termination.

SECTION 78. SPS 382.51 (3) (b) 3. is created to read:

SPS 382.51 (3) (b) 3. The storm sewer or manufactured home community drain system, storm serving the manufactured home shall terminate a minimum of 4 inches above the surrounding finished grade and may not terminate higher than the water service termination or manufactured home water supply system termination.

SECTION 79. SPS 382.51 (3) (c) is amended to read:

SPS 382.51 (3) (c) The ~~manufactured home~~ water service and building, manufactured home community water supply system, sanitary sewer, manufactured home community drain system, sanitary, storm sewer, and manufactured home community drain system, storm for a manufactured home shall be capped or plugged when not connected to a manufactured home.

SECTION 80. SPS 383.21 (3) (f) is amended to read:

SPS 383.21 (3) (f) A governmental unit may deny the issuance of a sanitary permit ~~only~~ if the application does not comply with the requirements of chs. SPS 383, 384 or 385 or when an existing POWTS system is determined to be failing, and a municipal or public sewer system is readily available.

SECTION 81. SPS 383.54 (3) (b) and (4) (a) are amended to read:

SPS 383.54 (3) (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. If after 3 years the combined sludge and scum volume is determined to be less than 1/3 of the tank volume, and servicing of the tank is not performed the tank shall be reinspected annually to ensure combined sludge and scum volumes do not exceed 1/3 of the tank volume. Yearly inspection will cease after the tank is serviced again and shall then be reinspected or serviced in 3 years to determine sludge and scum levels.

(4) (a) The servicing frequency of an anaerobic treatment tank for a POWTS existing prior to July 1, 2000, shall occur at least when the combined sludge and scum volume equals 1/3 of the tank volume. If after 3 years the combined sludge and scum volume is determined to be less than 1/3 of the tank volume, and servicing of the tank is not performed the tank shall be reinspected annually to ensure combined sludge and scum volumes do not exceed 1/3 of the tank volume. Yearly inspection will cease after the tank is serviced again and shall then be reinspected or serviced in 3 years to determine sludge and scum levels.

SECTION 82. SPS 384.11 is amended to read:

SPS 384.11 Appurtenance, device, fixture, material, and method listings. ~~Appurtenances, devices, fixtures, materials and methods shall conform to the referenced standard in Table 384.11.~~ Appurtenances, devices, fixtures, materials, and methods shall be listed by a nationally recognized, ANSI accredited, third party agency acceptable to the department. Appurtenances, devices, fixtures, materials, and methods that do not conform to the listed standards may achieve code compliance via Alternate or Experimental approvals in accordance with s. SPS 384.50.

SECTION 83. SPS Table 384.11 is repealed.

SECTION 84. SPS 384.20 (2) (b) and (Note) are amended to read:

SPS 384.20 (2) (b) All plumbing fixture fittings which are end-point devices, covered by the scope of ~~NSF~~ NSF/ANSI/CAN 61, section 9 and installed to supply water intended for human ingestion, shall conform to ~~NSF~~ NSF/ANSI/CAN 61, section 9.

Note: The scope of ~~NSF~~ NSF/ANSI/CAN 61, ~~annex G~~, defines which devices are intended for use for human ingestion in response to Section 1417 of the federal Safe Drinking Water Act, as amended.

SECTION 85. SPS 384.20 (4) (b) 2. is amended to read:

SPS 384.20 (4) (b) 2. ‘Securing wall mounted fixtures.’ Wall mounted fixtures shall be rigidly supported by a hanger which is attached to structural members so that the load is not transmitted to the fixture drain connection or any other part of the plumbing system. ~~The hanger for a wall-mounted water closet shall conform to ASME A112.6.1M.~~

SECTION 86. SPS 384.20 (4) (b) 2. a. and b. are created to read:

SPS 384.20 (4) (b) 2. a. When a floor-affixed support is used for off-the-floor fixtures, the support shall conform to ASME A112.6.1M.

b. When a carrier style manufactured framing-affixed support is used for off-the-floor fixtures, the support shall conform to ASME A112.6.2.

Note: The adoption of these standards is intended for "carrier" style, manufactured supports. It is not intended to prohibit the use of other acceptable methods of hanging fixtures.

SECTION 87. SPS 384.20 (5) (a) is amended to read:

SPS 384.20 (5) (a) *Automatic clothes washers.* Residential type automatic clothes washers shall ~~conform to ASSE 1007~~ be provided with an integral air gap or an approved cross connection method, device, or assembly outlined in Table 382.41-1 shall be installed. Air gaps shall comply with ASME A112.1.2 or A112.1.3.

SECTION 88. SPS 384.20 (5) (am) is created to read:

SPS 384.20 (5) (am) *Automatic Ice Making Equipment.* Automatic ice making equipment shall conform to NSF/ANSI 12.

SECTION 89. SPS 384.20 (5) (b) 1. b. and (d) are amended to read:

SPS 384.20 (5) (b) 1. b. Porcelain enameled formed steel bathtubs shall conform to ASME ~~A112.19.4M~~ A112.19.1/CSA B45.2.

(d) *Chemical dispensing systems.* Chemical dispensing systems shall conform to ~~ASSE 1055~~ ANSI/CAN/ASSE/IAPMO 1055.

SECTION 90. SPS 384.20 (5) (dm) is created to read:

SPS 384.20 (5) (dm) *Clothes dryers.* Clothes dryers shall be provided with an integral air gap or an approved cross connection method, device, or assembly outlined in Table 382.41-1 shall be installed. Air gaps shall comply with ASME A112.1.2 or A112.1.3.

SECTION 91. SPS 384.20 (5) (e) 1., (f) 1., (g) (Title), and 1. to 3. are amended to read:

SPS 384.20 (5) (e) 1. Residential type dishwashing machines shall ~~conform to ASSE 1006~~ be provided with an integral air gap or an approved cross connection method, device, or assembly outlined in Table 382.41-1 shall be installed. Air gaps shall comply with ASME A112.1.2 or A112.1.3.

(f) 1. Drinking fountains and water coolers shall conform to ~~ARI 1010 or ASME A112.19.2~~ A112.19.2/CSA B45.1, ASME A112.19.3/CSA B45.4.

(g) Floor and trench drains.

1. Floor and trench drains shall be provided with removable strainers of sufficient strength to carry the anticipated loads.

2. The floor or trench drain shall be so constructed that it can be cleaned, and the drain inlet shall be accessible at all times.

3. Floor and trench drains shall be of a size to efficiently serve the intended purpose. The floor or trench drain outlet ~~shall~~ may not be less than 2 inches in diameter.

SECTION 92. SPS 384.20 (5) (fm) and (g) 4. are created to read:

SPS 384.20 (5) (fm) Emergency fixtures. Emergency showers, eyewashes, eye/face washes, and combination units shall conform to ANSI/ISEA Z358.1.

(g) 4. Floor and trench drains shall conform to ASME A112.6.3.

SECTION 93. SPS 384.20 (5) (h) 1., (j) 1. a. to e., 2., and (5) (L) 1. and 4. are amended to read:

SPS 384.20 (5) (h) 1. Residential type food waste grinders shall conform to ASSE 1008. Commercial type food waste grinders shall conform to ~~ASSE 1009 or~~ an approved cross connection method, device, or assembly outlined in Table 382.41-1.

(j) 1. a. Enameled cast iron lavatories shall conform to ASME ~~A112.19.1M~~ A112.19.1/CSA B45.2.

b. Vitreous china lavatories shall conform to ASME ~~A112.19.2M~~ A112.19.2/CSA B45.1.

c. Stainless steel lavatories shall conform to ASME ~~A112.19.3~~ A112.19.3/CSA B45.4.

d. Porcelain enameled formed steel lavatories shall conform to ASME ~~A112.19.4~~ A112.19.1/CSA B45.2.

e. Plastic lavatories shall conform to ~~ANSI Z124.3~~ CSA B45.5/IAPMO Z124.

2. Cultured marble vanity tops with an integral lavatory shall conform to ~~ANSI Z124.3~~ CSA B45.5/IAPMO Z124.

(5) (L) 1. Prefabricated plastic showers and shower compartments shall conform to ANSI A124.1.2 CSA B45.5/IAPMO Z124. Manufactured shower receptors and shower bases shall conform to ASME A112.19.1/CSA B45.2, ASME A112.19.2/CSA B45.1, ASME A112.19.3/CSA B45.4, or CSA B45.5/IAPMO Z124.

4. ~~All~~ Except as provided in subd. 5., all shower compartments, regardless of shape, shall have a minimum finished interior of 900 square inches and shall be capable of encompassing a circle with a diameter of 30 inches. The minimum required area and dimension shall be measured in a horizontal plane 24 inches above the top of the threshold and may not extend beyond the centerline of the threshold. The minimum area and dimensions shall be maintained to a point 70 inches above the shower waste outlet with no protrusions other than the fixture valve or valves, showerheads, soap dishes, retractable seats and safety grab bars or rails.

SECTION 94. SPS 384.20 (5) (L) 5. is created to read:

SPS 384.20 (5) (L) 5. Shower compartments, regardless of shape, not capable of encompassing a circle with a diameter of 30 inches shall be capable of encompassing a circle with a diameter of not less than 25 inches, provided the shower compartment has not less than 1,300 square inches of cross sectional area. The minimum area and dimensions shall be maintained to a point 70 inches above the shower waste outlet with no protrusions other than the fixture valve or valves, showerheads, soap dishes, retractable seats and safety grab bars or rails.

SECTION 95. SPS 384.20 (5) (m) 1. a. to e., (n) 1. a. and b., 5., (o) 1. a. and b., and 6. are amended to read:

SPS 384.20 (5) (m) 1. a. Enameled cast iron sinks shall conform to ~~ASME A112.19.1M~~ A112.19.1/CSA B45.2.

b. Vitreous china sinks shall conform to ~~ASME A112.19.2~~ A112.19.2/CSA B45.1.

c. Stainless steel sinks shall conform to ~~ASME A112.19.3~~ A112.19.3/CSA B45.4.

d. Porcelain enameled formed steel sinks shall conform to ~~ASME A112.19.4~~ A112.19.1/CSA B45.2.

e. Plastic sinks shall conform to ~~ANSI Z124.6~~ CSA B45.5/IAPMO Z124.

(n) 1. a. Vitreous china urinals shall conform to ~~ASME A112.19.2~~ A112.19.2/CSA B45.1.

b. Plastic urinals shall conform to ~~ANSI Z124.9~~ CSA B45.5/IAPMO Z124.

5. Pressurized flushing devices to serve urinals shall conform to ~~ASSE 1037~~ 1037/ASME A112.1037/CSA B125.37.

(o) 1. a. Vitreous china water closets shall conform to ~~ASME A112.19.2~~ A112.19.2/CSA B45.1.

b. Plastic water closets shall conform to ~~ANSI Z124.4~~ CSA B45.5/IAPMO Z124.

6. Each water closet shall be individually equipped with a flushing device. Pressurized flushing devices shall conform to ASSE ~~1037~~ 1037/ASME A112.1037/CSA B125.37. All flushing devices shall be readily accessible for maintenance and repair. ~~Ballecks and fill~~ Fill valves shall be of the anti-siphon type and shall conform to ASSE ~~1002~~ 1002/ASME A112.1002/CSA B125.12. The critical level mark on the ~~balleck and~~ anti-siphon fill valve shall be located at least one inch above the full opening of the overflow pipe.

SECTION 96. SPS 384.20 (5) (o) 7. is created to read:

SPS 384.20 (5) (o) 7. Personal hygiene devices installed on water closets shall conform to ASME A112.4.2/CSA B45.16.

SECTION 97. SPS 384.20 (5) (p) 6. and (q) and (r) (Title) and 1. are amended to read:

SPS 384.20 (5) (p) 6. The initial temperature of water from ~~tankless-type~~ instantaneous water heaters installed for one- and 2-family dwelling use shall be $\leq 125^{\circ}\text{F}$.

(q) Water meters. A water meter which is used pursuant to s. SPS 383.54 (2) shall conform to AWWA C700, AWWA C701, AWWA C702, AWWA C704, ~~AWWA C706~~, AWWA C707, AWWA C708, or AWWA C710.

(r) Water treatment devices, chemicals, and components.

1. ~~Water softeners shall conform to NSF 44~~ treatment devices, chemicals, and components shall conform to a standard in Table 384.20-2.

SECTION 98. SPS Table 384.20-2 is created to read:

**Table 384.20-2
Water Treatment Devices, Chemicals, Components**

Applicable Items	Referenced Standard
Drinking Water Treatment Units - Aesthetic Effects	NSF/ANSI 42
Residential Cation Exchange Water Softeners	NSF/ANSI 44
Drinking Water Treatment Units - Health Effects	NSF/ANSI 53
Ultraviolet Microbiological Water Treatment Systems	NSF/ANSI 55
Reverse Osmosis Drinking Water Systems	NSF/ANSI 58
Drinking Water Treatment Chemicals - Health Effects	NSF/ANSI/CAN 60
Drinking Water Distillation Systems	NSF/ANSI 62
Drinking Water System Components - Lead Content	NSF/ANSI 372

Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities	NSF/ANSI/CAN 50
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SECTION 99. SPS 384.20 (6) (a) is amended to read:

SPS 384.20 (6) (a) ~~Except for circular and semi-circular wash fountains, all~~ All faucets and showerheads shall conform to ASME ~~A112.18.1 or CAN/CSA B125.1~~ A112.18.1/CSA B125.1.

SECTION 100. SPS 384.20 (6) (b) is repealed.

SECTION 101. SPS 384.20 (6) (c) (intro.), 2. b., and c. are amended to read:

SPS 384.20 (6) (c) Flexible fixture supply connectors shall conform to ASME ~~A112.18.6-2017/CSA B125.6-17~~ A112.18.6/CSA B125.6 and all of the following:

2. b. “For use with water in accessible locations only.” This requirement is not applicable to flexible connectors integral to an ASME ~~A112.8.1/CSA B125.1~~ A112.18.1/CSA B125.1 compliant faucet.

c. Flexible connectors intended only for cold water applications shall include “Only for use with cold water.” This requirement is not applicable to flexible connectors integral to an ASME ~~A112.8.1/CSA B125.1~~ A112.18.1/CSA B125.1 compliant fixture.

SECTION 102. SPS 384.20 (7) and Table 384.20-3 are created to read:

SPS 384.20 (7) WASTEWATER TREATMENT COMPONENTS AND METHODS. Wastewater treatment components and methods, other than POWTS, shall conform to the applicable standard in Table 384.20-3.

**Table 384.20-3
Wastewater Treatment Components and Methods**

Applicable Components and Methods	Referenced Standard(s)
Drainfield Trench Product Sizing for Gravity Dispersal Onsite Wastewater Treatment and Dispersal Systems	NSF/ANSI 240
Evaluation of Components and Devices Used in Wastewater Treatment Systems	NSF/ANSI 46
FOG (Fats, Oils and Greases) Disposal Systems	ASME A112.14.6
Grease Interceptors	CSA B481 Series 12
Grease Interceptors, Corrugated HDPE	ASTM F2649
Grease Interceptors, Hydromechanical	ASME A112.14.3
Grease Interceptors, Precast Concrete	ASTM C1613

Grease Interceptors with FOG Sensing and Alarm Devices, Testing and Certification for	PDI-G 102
Grease Removal Devices	ASME A112.14.4
Hydro Mechanical Grease Interceptors with Appendix of Installation and Maintenance, Testing and Rating Procedure for	PDI-G 101
Installation of Thermoplastic Pipe and Corrugated Pipe in Septic Tank Leach Fields, Standard Practice for	ASTM F481
Non-Liquid Saturated Treatment Systems	NSF/ANSI 41
Onsite Residential and Commercial Water Reuse Treatment Systems	NSF/ANSI 350
Onsite Residential and Commercial Greywater Treatment Systems for Subsurface Discharge	NSF/ANSI 350-1
Prefabricated Grease Interceptors	IAPMO/ANSI Z1001
Prefabricated Septic Tanks and Sewage Holding Tanks, Design, Material and Manufacturing Requirements for	CSA B66
Residential Wastewater Treatment Systems	NSF/ANSI 40
Residential Wastewater Treatment Systems – Nitrogen Reduction	NSF/ANSI 245
Septic Tanks, Precast Concrete	ASTM C1227
Water Quality Units, Corrugated HDPE	ASTM F2737

SECTION 103. SPS 384.30 (1) (a) to (f) and (1m) are created to read:

SPS 384.30 (1) (a) The bending or offsetting of flexible or annealed pipe or tubing shall be in accordance with the applicable material standard or the instructions of the manufacturer of the pipe or tubing.

(b) Pipe or tubing with gouges, cuts or deep scratches may not be installed.

(c) Pipe or tubing which has been kinked may not be installed.

(d) The bending or offsetting of rigid pipe shall be prohibited.

(e) Plastic pipe or tubing and copper pipe or tubing penetrating building framing members within 1 inch of the framing edge shall be protected by steel plates not less than no. 18 gauge in thickness. The steel nail plate shall extend along the building framing member not less than 1 1/2 inches beyond the outside diameter of the pipe or tubing.

(f) Pipe and tubing for water distribution systems downstream of treatment devices designed to serve fixtures, appliances and devices that provide < 1 gpm at each outlet shall be sleeved when penetrating a wall, floor or structural member.

(1m) LEAD-FREE MATERIALS.

(a) *Definitions.* In this subsection:

1. “Coating” means a thin layer of material such as paint, epoxy, zinc galvanization, or other material usually applied by spraying or in liquid form to coat internal surfaces of pipes, fittings, or fixtures.

2. “Liner” means a rigid lining such as a plastic or copper sleeve that is sealed with a permanent barrier to exclude lead-bearing surfaces from water contact and of sufficient thickness and otherwise having physical properties necessary to prevent erosion and cracking for the expected useful life of the product.

3. “Public water system” has the meaning in 40 CFR 141.2

(b) *Water supply systems.* Except as provided in par. (c) and notwithstanding the provisions of sub. (4), no person may use any pipe, any pipe or plumbing fitting or fixture, any solder or any flux that is not lead-free as defined in s. SPS 381.01 (141) in the installation or repair of:

1. Any public water system.

2. Any plumbing in a residential or nonresidential facility providing water for human consumption.

(c) *Repair of cast iron pipes.* The requirements of par. (b) shall not apply to leaded joints necessary for the repair of cast iron pipes.

(d) *Calculation.* Calculations to determine the lead content of a material, pipe, pipe fitting, plumbing fitting, or fixture shall comply with all of the following:

1. The weighted average lead content of a pipe, pipe fitting, plumbing fitting, or fixture is calculated by using the following formula: For each wetted component, the percentage of lead in the component is multiplied by the ratio of the wetted surface area of that component to the total wetted surface area of the entire product to arrive at the weighted percentage of lead of the component. The weighted percentage of lead of each wetted component is added together, and the sum of these weighted percentages constitutes the weighted average lead content of the product. The lead content of the material used to produce wetted components is used to determine if a material is lead-free. For lead content of materials that are provided as a range, the maximum content of the range must be used.

2. If a coating is applied to the internal surfaces of a pipe, fitting or fixture component, the maximum lead content of both the coating and the alloy must be used to calculate the lead content of the component.

3. If a liner is manufactured into a pipe, fitting or fixture, the maximum lead content of the liner must

be used to calculate the lead content of the component.

4. If a fixture contains any media (e.g., activated carbon, ion exchange resin) contained in filters, the media are not to be used in determining the “total wetted surface area of the entire product” in subd. 1. of this section.

5. In addition to the definition of “lead-free” in s. SPS 381.01 (141) and the requirements of this subsection, no drinking water cooler, which contains any solder, flux, or storage tank interior surface, which may come into contact with drinking water, is lead-free if the solder, flux, or storage tank interior surface contains more than 0.2 percent lead. Drinking water coolers must be manufactured such that each individual part or component that may come in contact with drinking water shall not contain more than 8 percent lead while still meeting the maximum 0.25 percent weighted average lead content of the wetted surfaces of the entire product.

SECTION 104. SPS Table 384.30-1, Table 384.30-2, Table 384.30-3, Table 384.30-4, Table 384.30-5, 384.30 (3) (d), (e) 3. (Note), Table 384.30-6, Table 384.30-7, Table 384.30-8, and (5) (a) are amended to read:

Table 384.30-1 (Partial)
ABOVE GROUND DRAIN AND VENT PIPE
AND TUBING

Material	Standard
Acrylonitrile butadiene styrene (ABS)	ASTM D1527; ASTM D2661

Table 384.30-2 (Partial)
UNDERGROUND DRAIN AND VENT PIPE
AND TUBING

Material	Standard
Acrylonitrile butadiene styrene (ABS)	ASTM D1527; ASTM D2661
Chlorinated Poly Vinyl Chloride (CPVC) ^d	ASTM D2846/D2846M; ASTM F441/F441M; ASTM F442/F442M; ASTM F2618
Stainless steel ^d (316L)	ASME A112.3.1; ASME B36.19 / B36.19M B36.19; ASME B36.19M; ASTM A269/A269M; ASTM A312/A312M; ASTM A450/A450M; ASTM A778/A778M; AWWA C220

~~d. Type 304 may not be installed underground.~~

Table 384.30-3 (Partial)
SANITARY BUILDING SEWER PIPE
AND TUBING

Material	Standard
Acrylonitrile butadiene styrene (ABS) ^a	ASTM D1527 ; ASTM D2661; ASTM D2751
Chlorinated polyvinyl chloride (CPVC) ^{e a}	ASTM F441/F441M; ASTM F442/F442M; ASTM F2618; ASTM D2846
PVC Large Diameter Plastic Gravity Sewer Pipe and Fittings	ASTM F679
Type PS 46 and Type PS 115 PVC Plastic Gravity Flow Sewer Pipe and Fittings^a	ASTM F789
Stainless steel (316L)	ASME A112.3.1; ASME B36.19 / B36.19M B36.19; ASME B36.19M; ASTM A269/A269M; ASTM A312/A312M; ASTM A450/A450M; ASTM A778/A778M; AWWA C220

Table 384.30-4 (Partial)
PERFORATED EFFLUENT DISTRIBUTION PIPING
FOR NONPRESSURIZED SOIL ABSORPTION
SYSTEMS

Material	Standard
Acrylonitrile butadiene styrene (ABS)	ASTM D1527 ; ASTM D2661; ASTM D2751

(3) (d) Subsoil drains shall be open jointed, horizontally split, or perforated pipe conforming to one of the standards listed in Table ~~384.30-7~~ 384.30-4.

Table 384.30-5 (Partial)
PRESSURIZED DRAIN PIPE AND TUBING AND SERVICE SUCTION
LINES

Material	Standard
Acrylonitrile butadiene styrene (ABS) ^a	ASTM D1527 ; ASTM D2661
<u>Polyethylene (PE)</u>	<u>ASTM F714</u>

(e) **3. Note:** See s. SPS 382.36 (10) ~~and (11)~~ for additional roof drain requirements.

Table 384.30-6 (Partial)
STORM BUILDING SEWER PIPE AND TUBING

Material	Standard
Acrylonitrile butadiene styrene (ABS) ^a	ASTM D1527 ; ASTM D2661; ASTM D2751
PVC Large Diameter Plastic Gravity Sewer Pipe and Fittings	ASTM F679
Type PS 46 and Type PS 115 PVC Plastic Gravity Flow Sewer Pipe and Fittings	ASTM F789
Stainless steel (316L)	ASME A112.3.1; ASME B36.19 / B36.19M B36.19; ASME B36.19M; ASTM A269/A269M; ASTM A312/A312M; ASTM A450/A450M; ASTM A778/A778M; AWWA C220

Table 384.30-7 (Partial)
PIPE AND TUBING FOR
WATER SERVICES AND PRIVATE WATER MAINS

Material	Standard
Acrylonitrile butadiene styrene (ABS)^a	ASTM D1527 ; ASTM D2282
Polyethylene (PE) ^a	ASTM D2239; ASTM D2737; ASTM D2104 ; ASTM D2447 ; ASTM D3035; AWWA C906; AWWA C901
Stainless steel (316L) ^e	ASME B36.19/B36.19M; ASTM A269; ASTM A270; ASTM A312; ASTM A358/A358M; ASTM A450; ASTM A554; ASTM A778/A778M

~~d. May not be threaded.~~

e. Type 304 may not be installed underground.

Table 384.30-8 (Partial)
WATER DISTRIBUTION PIPE AND TUBING

Material	Standard
<u>Polypropylene (PP-RCT)</u>	<u>ASTM F2389</u>

Stainless Steel (~~316L~~)^h

ASME B36.19M; ASTM
A269; ASTM A270; ASTM
A312; ASTM A358/A358M;
ASTM A450; ASTM A554;
ASTM A778/A778M

~~f. Use is limited to cold water distribution only.~~

~~g. May not be threaded.~~

h. Type 304 may not be installed underground.

(5) (a) *Fittings*. Pipe fittings shall conform to the pipe material standards listed in this chapter or one of the standards listed in Table ~~384.30-11~~ 384.30-9. Threaded drain pipe fittings shall be of the recessed drainage type.

SECTION 105. SPS Table 384.30-9, 384.30 (5) (bm), and Table 384.30-10 are created to read:

**Table 384.30-9
Fittings**

Fittings	Referenced Standard(s)^a
Fittings, Acrylonitrile Butadiene Styrene (ABS)	ASTM D3311, ASTM F409
Fittings, Appurtenances or Valves for use in CPVC or CPVC Systems, Specially Engineered	ASTM F1970
Fittings, Cast Bronze	ASME B16.15, ASME B16.24
Fittings, Cast Copper Alloy	ASME B16.18, ASME B16.23, ASME B16.26
Fittings, Cast Iron	ASME B16.1, ASME B16.4, ASME B16.12, ASME B16.45
Fittings, Chlorinated Polyvinyl Chloride (CPVC)	ASTM F437, ASTM F438, ASTM F439
Fittings, Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) Tubing	ASTM F1960
Fittings, Cold-Expansion with Metal Compression Sleeves for Crosslinked Polyethylene (PEX) Pipe and SDR9 Polyethylene of Raised Temperature (PE-RT) Pipe	ASTM F2080
Fittings, Copper	ASME B16.22, ASME B16.29

Fittings, Crosslinked Polyethylene (PEX)	ASTM F1807
Fittings, Ductile Iron and Gray Iron	AWWA C110, AWWA C153, ASME B16.42
Fittings, Gray Iron Pipe Flanges and Flanged Fitting Classes 25, 125 and 250	ASME B16.1
Fittings, Gray Iron Threaded Fitting Classes 125 and 250	ASME B16.4
Fittings, Malleable Iron ^b	ASME B16.3
Fittings, Metric- and Inch-Sized Fittings for PEX Pipe	ASTM F2829/F2829M
Fittings, Polyethylene (PE)	ASTM D2609, ASTM D2683, ASTM D3261
Fittings, Polyvinyl Chloride (PVC)	ASTM D2464, ASTM D2466, ASTM D2467, ASTM D3311, ASTM F409, ASTM F1336, ASTM F1866
Fittings, Polyvinyl Chloride (PVC) Gasketed Sewer	ASTM F1336
Fittings, Push-Fit ^{c, d}	ASSE 1061
Fittings, Push-Fit PEX Mechanical Fittings for PEX Tubing	ASTM F2854
Fittings, Stainless Steel	ASTM A403/A403M, ASTM A774/A774M
Fittings, Standard Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene and PEX Pipe and Tubing	ASTM F1055
Fittings, Steel ^e	ASME B16.5, ASME B16.9, ASME B16.11, ASME B16.28
Gaskets, Rubber for Cast Iron Soil Pipe and Fittings	ASTM C564, CISPI 301, FM 1680
Insert Fittings, Metal, for PE-AL-PE and Crosslinked PEX-AL-PEX Composite Pressure Pipe, Standard Specification for	ASTM F1974
Insert Fittings, Metal, Utilizing a Copper Crimp Ring for SDR9 PEX and SDR9 PEX-AL-PEX Tubing, Standard Specification for	ASTM F2434

Insert Fittings, Metal Press with Factory Assembled Stainless Steel Press Sleeve for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE- RT) Tubing	ASTM F3347
Insert Fittings, Plastic, for SDR9 PEX and PE-RT Tubing	ASTM F2735
Insert Fittings, Plastic Press with Factory Assembled Stainless Steel Press Sleeve for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE- RT) Tubing	ASTM F3348
Insert Fittings, Plastic Utilizing a Copper Crimp Ring, or Alternate Stainless Steel Clamps for SDR9 Crosslinked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing	ASTM F2159
Insert Fittings, Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) to Metal Insert and Plastic Insert Fittings	ASTM F2098

a. The specific standard edition adopted is specified in s. SPS 381.20.

b. NSF Registration Guidelines for Proprietary Substances and Nonfood Compounds. The NSF Nonfood Compounds Registration Program is a continuation of the USDA product approval and listing program, which is based on meeting regulatory requirements including FDA 21 CFR for appropriate use, ingredient, and labeling: <https://info.nsf.org/usda/psnclistings.asp>.

c. Nominal size \leq 2 inches CTS.

d. May not be used in temperature/pressure relief valve drain lines unless they are tested and rated for excessive conditions of 210°F (98.9°C) and 150.0 psig (1034 kPa), per ASME A112.4.1 or ASTM F877.

e. Steel and malleable iron fittings used in a water supply system shall be galvanized in accordance with ASTM A123/A123M.

SPS 384.30 (5) (bm) *Cross connection control.* A cross connection control method, device, or assembly shall conform to a referenced standard in Table 384.30-10 and listed by a nationally recognized listing agency acceptable to the department.

Note: See SPS 384 Appendix for a list of nationally recognized listing agencies acceptable to the Department.

**Table 384.30-10
Cross Connection Control**

Backflow Preventer	Adopted Standard
Air Gaps in Plumbing Systems (For Plumbing Fixtures and Water-Connected Receptors)	ASME A112.1.2
Air Gap Fittings for use with Plumbing Fixtures, Appliances, and Appurtenances	ASME A112.1.3
Atmospheric Type Vacuum Breakers	ASSE 1001 / CSA B64.1.1
Backflow Preventers for Beverage Dispensing Equipment	ASSE 1022 / CSA B64.3.1
Backflow Preventers for Hand-Held Showers	ASSE 1014, ASME A112.18.1/CSA B125.1, or ASME A112.18.3
Backflow Preventers with Integral Pressure Reducing Boiler Feed Valve and Intermediate Atmospheric Vent Style for Domestic and Light Commercial Water Distribution Systems	ASSE 1081
Backflow Preventers with an Intermediate Atmospheric Vent	ASSE 1012 / CSA B64.3
Backflow Protection Devices and Systems in Plumbing Fixture Fittings	ASME A112.18.3
Double Check Backflow Prevention Assemblies	ASSE 1015 / CSA B64.5
Double Check Valve Backflow Preventers for Fire Protection Systems	CSA B64.5.1
Double Check Detector Backflow Prevention Assemblies	ASSE 1048
Dual Check Backflow Preventers	ASSE 1024 / CSA B64.6
Dual Check Valve Type Backflow Preventers for Carbonated Beverage Dispensers, Post Mix Type, and Non-Carbonated Beverage Dispensers	ASSE 1032
Hose Connection Backflow Preventers	ASSE 1052 / CSA B64.2.1.1
Hose Connection Vacuum Breakers	ASSE 1011 / CSA B64.2
Laboratory Faucet Backflow Preventers	ASSE 1035 / CSA B64.7
Pressure Vacuum Breaker Assemblies	ASSE 1020 / CSA B64.1.2
Pressurized Flushing Devices for Plumbing Fixtures	ASSE 1037/ASME A112.1037/CSA B123.37

Reduced Pressure Principle Backflow Prevention Assemblies	ASSE 1013 / CSA B64.4
Reduced Pressure Principle Backflow Preventers for Fire Protection Systems	CSA B64.4.1
Reduced Pressure Detector Backflow Prevention Assemblies	ASSE 1047
Spill Resistant Vacuum Breaker Assemblies	ASSE 1056 / CSA B64.1.3

SECTION 106. SPS 384.30 (5) (c) 1. to 3. are amended to read:

SPS 384.30 (5) (c) 1. Water hammer arrestors shall conform to ~~ASME A112.26.1~~ or ASSE 1010.

2. Relief valves and automatic gas shutoff devices for hot water supply systems shall conform to ANSI ~~Z21.22~~ Z21.22/CSA 4.4.

3. Backwater valves shall conform to ASME A112.14.1, ~~CAN/CSA B181.1~~ or ~~CAN/CSA B181.2~~ CSA B1800.

SECTION 107. SPS 384.30 (5) (c) 4. and 6. and 7. and 8. and 9. and 10. and 13. and 14. and 15. and 16. and 17. and 18. and 19. are repealed.

SECTION 108. SPS 384.30 (5) (c) 22. to 27. are created to read:

SPS 384.30 (5) (c) 22. Yard hydrants shall conform to ASSE 1057 for freeze resistant sanitary yard hydrants with backflow prevention.

23. Stack air admittance valves for sanitary drainage shall conform to ASSE 1050.

24. Individual and branch type air admittance valves for sanitary drainage systems shall conform to ASSE 1051.

25. Valves for crosslinked polyethylene (PEX) water distribution tubing systems shall conform to NSF 359.

26. Automatic temperature control mixing valves shall conform to ASSE 1069.

27. Water temperature limiting devices shall conform to ASSE 1070/ASME A112.1070/CSA B125.70.

SECTION 109. SPS 384.30 (5) (d) 1. and (6) (c) and (e) and (f) are amended to read:

SPS 384.30 (5) (d) 1. Pipe saddles may be installed on ~~private interceptor main sewers, building sewers, underground drain and vent pipe and tubing,~~ and where otherwise approved by the department.

(6) (c) Sheet copper. Sheet copper for the following uses may not weigh less than indicated in

subds. 1. and 2. and shall conform to ASTM ~~B152~~ B152/B152M.

(e) *Flush pipes and fittings*. Flush pipes and fittings shall be of nonferrous material and shall conform to ASME ~~A112.19.5~~ A112.19.5/CSA B45.15.

(f) *Safing material*. Safing materials shall be waterproof when subjected to 2 feet of hydrostatic head when tested in accordance with ASTM ~~C1306~~ C1306/1306M or ASTM D4068. The material shall be recognized by the manufacturer for use as a safing material.

SECTION 110. SPS 384.30 (6) (h) 4. is created to read:

SPS 384.30 (6) (h) 4. Leaching chambers shall conform to ASTM F2418, ASTM F2787, ASTM F2922, or ASTM F3430.

SECTION 111. SPS 384.30 (6) (i) 1. and (j) are amended to read:

SPS 384.30 (6) (i) 1. Conform to ASTM ~~Standard C33~~ C33/C33M for coarse aggregate prior to washing.

(j) *Sand*. Sand that is placed as a filtering medium in a stormwater subsurface infiltration system shall conform to ASTM ~~Standard C33~~ C33/C33M for fine aggregate.

SECTION 112. SPS 384.40 (2) (a) 2. and (b) 4. are repealed.

SECTION 113. SPS 384.40 (6) (a) and (b), (7) (a) and (b), (8) (a) and (d), (9) (a), and (12) (intro.) are amended to read:

SPS 384.40 (6) (a) Mechanical joints. Mechanical joints shall be installed in accordance with the manufacturer's instructions. Mechanical push-on type joints which use flexible elastomeric seals shall be suitable for potable water and conform to ASTM D3139.

(b) *Solvent cemented joints*. Solvent cemented joints shall be made in accordance with ASTM D2846, ASTM F493, or ASTM ~~F3328-18~~ F3328.

(7) (a) *Circular pipe*. Joints between circular concrete pipe or fittings shall be made by use of an elastomeric seal conforming to ASTM C443, ~~or ASTM C443M~~, ASTM C990, or ASTM C990M. Joints using rubber gaskets for concrete gravity flow sewer pipe shall conform to ASTM C1628.

(b) *Elliptical pipe*. Joints between elliptical concrete pipe or fittings shall be made by use of materials conforming to ASTM C887 Type II, ~~or ASTM C990~~, or ASTM C990M.

(8) (a) *Brazed joints*. All joint surfaces to be brazed shall be cleaned bright by other than chemical means. Brazing filler metal conforming to AWS A5.8, ~~NSF/ANSI~~ NSF/ANSI/CAN 61, ~~annex G~~, or other approved material shall be used. The joining of water supply piping shall be made with lead-free materials.

(d) Soldered joints. All joint surfaces to be soldered shall be made in accordance with ASTM B828. Flux approved by NSF for use in potable water systems shall be applied to all joint surfaces. Solder conforming to ASTM B32, ~~NSF/ANSI~~ NSF/ANSI/CAN 61, ~~annex G,~~ or other approved material shall be used. The joining of water supply piping shall be made with lead-free materials.

(9) (a) Mechanical joints. Mechanical push-on joints and mechanical compression type joints for water supply systems shall conform to AWWA ~~C111~~ C111/A21.11. Lead tipped gaskets may not be used.

(12) PE PLASTIC PIPE AND TUBING. Joints between polyethylene plastic pipe, tubing or fittings shall be in accordance with pars. ~~(a) to~~ (b) and (c).

SECTION 114. SPS 384.40 (12) (a) is repealed.

SECTION 115. SPS 384.40 (12) (b) and (c) are amended to read:

SPS 384.40 (12) (b) Heat fusion joints. Heat fusion joints shall be made in accordance with ASTM D2657 F2620. ~~Heat fusion joints shall be of a socket fusion type.~~

(c) Mechanical joints. Mechanical joints may be installed in accordance with the manufacturer's instructions. Mechanical push-on joints and mechanical compression type joints which use flexible elastomeric seals shall be suitable for potable water and conform to ASTM D3139.

SECTION 116. SPS 384.40 (12m) is created to read:

SPS 384.40 (12m) POLYOLEFIN PIPE AND TUBING. Excluding polyethylene pipe and fittings, heat fusion joints between polyolefin pipe and tubing shall be made in accordance with ASTM D2657.

SECTION 117. SPS 384.40 (14) (a) 2., (b), and (16) are amended to read:

SPS 384.40 (14) (a) 2. 'Water supply systems.' Mechanical push-on joints and mechanical compression type joints for water supply systems which use flexible elastomeric seals shall be suitable for potable water and conform to ASTM D3139.

(b) Solvent cemented joints. Solvent cemented joints shall be made in accordance with ASTM D2855 or ASTM ~~F3328.18~~ F3328.

(16) JOINTS BETWEEN PIPE AND FITTINGS OF DIFFERENT MATERIALS. ~~Dielectric unions shall be installed at the point of connection of dissimilar metal piping materials.~~ Connections between pipes of different materials shall be made with mechanical compression type joints, installed in accordance with manufacturer's instructions or as specified in pars. (a) to (e). Dissimilar pipe materials shall be protected to prevent the flow of galvanic current or to isolate sections of pipe from stray currents which could cause accelerated corrosion and premature failure of plumbing components and associated piping. Dielectric nipples shall conform ASME B1.20.1 or ASTM A53. Dielectric unions shall conform to ASSE 1079. Dielectric flanges shall conform to ASME B16.24. Dielectric transitions fittings shall conform to ANSI/NSF-61 and NSF 372.

SECTION 118. SPS 384.40 (16) (a) to (e) are created to read:

SPS 384.40 (16) (a) *Copper to cast iron.* Connections between copper pipe or tube and cast iron pipe shall be by means of either caulked joints in accordance with sub. (5) (a) or threaded fittings in accordance with sub. (5) (c).

(b) *Cast iron to steel or brass pipe.* Connections between cast iron pipe and galvanized or black steel or brass pipe shall be by means of any of the following:

1. Caulked joints in accordance with sub. (5) (a).
2. Threaded joints in accordance with sub. (5) (c).

(c) *Plastic to other materials.*

1. Connections between plastic pipe and cast iron pipe shall be by means of any of the following:

- a. Caulked joints in accordance with sub. (5) (a).
- b. Threaded joints in accordance with sub. (5) (c).

2. Except as provided in par. (e), connections between different types of plastic pipe or between plastic pipe and other piping materials other than cast iron shall be by means of threaded joints in accordance with sub. (14) (c).

(d) *Lead to other piping materials.* Connections between lead pipe and other piping materials shall be by use of an adapter fitting conforming to s. SPS 384.30 (5) (a). The lead pipe shall be caulked or burned to the adapter fitting in accordance with sub. (11).

(e) *ABS plastic to PVC plastic.* For solvent-cemented connections between ABS and PVC piping in non-pressurized systems, all of the following shall apply:

1. Joint surfaces shall be clean and free of moisture.
2. Primer conforming to ASTM F656 shall be applied to all PVC joint surfaces.
3. Solvent conforming to ASTM D3138 shall be applied to all joint surfaces and the joint shall be made while the cement is wet.
4. Solvent shall be handled in accordance with ASTM F402.

SECTION 119. SPS 384.40 (18) is amended to read:

SPS 384.40 (18) CONNECTION OF PIPE TO CONCRETE STRUCTURES. Joints between concrete structures and piping or fittings shall be ~~made with mechanical joints in conformance with ASTM-C923, ASTM C564 installed in accordance with the provisions of pars. (a) to (e)~~ or as otherwise permitted by local authority. ~~Openings for pipe connections that are installed with mechanical joints~~

~~conforming to ASTM C564 shall have an inside diameter of that required for cast iron pipe in conformance with ASTM A74.~~

SECTION 120. SPS 384.40 (18) (a) to (e) are created to read:

SPS 384.40 (18) (a) Resilient connectors between reinforced concrete manhole structures, pipes, and laterals shall conform to ASTM C923/C923M.

(b) Rubber gaskets for cast iron soil pipe and fittings shall conform to ASTM C564. Openings to cast iron soil pipe shall have an inside diameter of that required for cast iron pipe in conformance with ASTM A74.

(c) Resilient connectors between reinforced concrete manhole structures and corrugated dual- and triple-wall polyethylene and polypropylene pipes shall conform to ASTM F2510/F2510M.

(d) Resilient connectors between reinforced concrete on-site wastewater tanks and pipes shall conform to ASTM C1644.

(e) Storm drain resilient connectors between reinforced concrete storm sewer structures, pipes, and laterals shall conform to ASTM C1478/C1478M.

SECTION 121. EFFECTIVE DATE. The rules adopted in this order shall take effect on the first day of the month following publication in the Wisconsin Administrative Register, pursuant to s. 227.22 (2) (intro.), Stats.

(END OF TEXT OF RULE)
