${\bf SEPTEMBER~2024~PLUMBING~CODE~ADVISORY~COMMITTEE}$

ITEM NO.	ISSUE/REASON FOR CHANGE	WI ADMIN CODE SPS SECTION AFFECTED	EXISTING LANGUAGE AND PROPOSED CHANGES TO SPS	PROPOSED CODE LANGUAGE	PLAIN LANGUAGE ANALYSIS, RECOMMENDATIONS, AND PRESENTERS
2a-b		SPS 381.01	SPS 381.01 Definitions. In chs. SPS 381 to 387, except as otherwise specifically defined: (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.	SPS 381.01 Definitions. In chs. SPS 381 to 387, except as otherwise specifically defined: 381.01 (116) "Health care facility" means a hospital, nursing home, community-based residential facility, inpatient hospice, or ambulatory surgery center. 381.01 (117m) "Health care related facility" means an assisted living, residential care apartment complex, memory care, infirmary, inpatient mental health center, 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.	
2a	Amend	SPS 381.01 (116)	381.01 (116) "Health care facility" means a hospital, nursing home, community-based residential facility, inpatient hospice, or ambulatory surgery center.	381.01 (116) "Health care facility" means a hospital, nursing home, community-based residential facility, inpatient hospice, or ambulatory surgery center.	Inpatient hospice occupancy belongs within health car facility definition. The Department recommends adding 'inpatient hospice' from the 'health care facility' definition. Presented by: Mike McNally
2b	Amend	SPS 381.01 (117m)	381.01 (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.	381.01 (117m) "Health care related facility" means an assisted living, residential care apartment complex, memory care, infirmary, inpatient mental health center, 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.	Inpatient hospice occupancy belongs within 'health care facility' definition. The Department recommends removing 'inpatient hospice' from the 'health care related facility' definition. Presented by: Mike McNally
3	Amend	Table 381.20-12	Table 381.20-12 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 1. STI-P-STI/SPFA External Corrosion Protection of Underground Steel STI-P3-2018 Storage Tanks, Specifications and Manual for	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 1. STI-P3-2018 External Corrosion Protection of Underground Steel Storage Tanks, Specifications and Manual for	STI-P3-2018 is the correct name of the standard. The Department recommends removing 'STI-P STI/SPFA' from the standard name. Presented by: Mike McNally
4	Amend	SPS 382.20 (4) (d) 1. a.	382.20 Plan review and cross connection control assembly registration. (4) Plans and specifications (d) 1. When requesting approval of an experimental plumbing system, all of the following shall be submitted: a. At least 2-sets one set of plans signed in accordance with par. (d) and detailing the system installation for each site.	382.20 Plan review and cross connection control assembly registration. (4) Plans and specifications (d) 1. When requesting approval of an experimental plumbing system, all of the following shall be submitted: a. At least one set of plans signed in accordance with par. (d) and detailing the system installation for each site.	SPS 382.20 (4) (a) was changed to only allow 1 plan set to be submitted. SPS 382.20 (4) (d) 1. a. still requires 2 sets of plans to be submitted for experimental plumbing systems. The Department recommends changing SPS 382.20 (4) (d) 1. a. from 2 plans to 1 set of plans. Presented by: Mike McNally
6a-b		SPS 382.31	382.31 Vents and venting systems. (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 ±50.5 of an inch or less, it will be considered a passing AAV.	382.31 Vents and venting systems. (17m) AIR ADMITTANCE VALVES. The use of air admittance valves 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 0.5 of an inch or less, it will be considered a passing AAV.	
6a	Amend	SPS 382.31 (17m)	382.31(g17m) AIR ADMITTANCE VALVES. The use of air admittance valves in lieu of traditional venting shall comply with all of the following:	382.31(17m) AIR ADMITTANCE VALVES. The use of air admittance valves shall comply with all of the following:	The phrase ' in lieu of traditional venting' within SPS 382.31 (17m) is a confusing phrase. As an example; if an air admittance valve is used on a common vent situation, then the venting is still considered 'traditiona venting.' The Department recoomends removing the phrase ' in lieu of traditional venting' from SPS 382.31 (17m). Presented by: Ryan Boebel
6b	Amend	SPS 382.31 (17m) (f)	382.31(17fm)(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 50.5 of an inch or less, it will be considered a passing AAV.	382.31(17m)(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 0.5 of an inch or less, it will be considered a passing AAV.	SPS 382.31 (17m) (f) states ",if the pressure falls .5". The '.5' should correctly state '0.5.' The Department recommends changing '.5' to '0.5.' Presented by: Ryan Boebel
7a-e		SPS 382.32 (4)	SPS 382.32 Traps and direct fixture connections. (4) Installation. (b) Distance from fixture drain outlets. 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 weir shall not exceed 45 24". 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 not exceed 36". 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 not exceed 60". c. The vertical distance between the water level in the bowl of a floor outlet water closet or floor outlet clinic sink and the center line of the horizontal portion of the fixture drain may not exceed 36 inches. d. The vertical distance from 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 may exceed 3 feet so as to permit the trap to be installed below the predicted depth of frost. e. The vertical distance of a floor outlet fixture between the top of the fixture drain outlet and the horizontal center line of the trap outlet may not exceed 18 inches.	SPS 382.32 Traps and direct fixture connections. (4) Installation. (b) Distance from fixture drain outlets. 1. 'Vertical distance.' Except as provided in subd. 1. a. to d., the vertical distance between the top of the fixture drain outlet and the trap weir shall not exceed 24". a. The vertical distance between the top of the strainer of a floor drain or the opening of a standpipe receptor and the trap weir shall not exceed 36". b. The vertical distance between the top of the fixture drain outlet of a pedestal fixture or a cuspidor and the trap weir shall not exceed 60". c. The vertical distance between the water level in the bowl of a floor outlet water closet or floor outlet clinic sink and the center line of the horizontal portion of the fixture drain may not exceed 36 inches. d. The vertical distance from the 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 to permit the trap to be installed below the predicted depth of frost.	
7a	Amend	SPS 382.32 (4) (b) 1.	382.32(4)(b)1. 'Vertical distance.' Except as provided in subd. 1. a. to ed., the vertical distance between the top of the fixture drain outlet and the horizontal center line of the trap outlet weir shall not exceed 4524".	382.32(4)(b)1 . 'Vertical distance.' Except as provided in subd. 1. a. to d., the vertical distance between the top of the fixture drain outlet and the trap weir shall not exceed 24".	SPS 382.32 (4) (b) 1. references subdivisions 1 a. to c. The reference should include 1. d. and 1 d. In addition the vertical distance should be changed from 15" to 24" to conincide with the 2024 Uniform Plumbing Code and 2024 International Plumbing Code. The Department recommends changing the reference from 1 a. to c.' to 1 a. to d.' and change the vertical distance from 15" to 24". The vertical distance is measured from the fixture outlet drain and trap weir. Presented by: Mike McNally

7b	Amend	SPS 382.32 (4) (b) 1. a.	382.32(4)(b)1.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 not exceed 36".	382.32(4)(b)1.a. The vertical distance between the top of the strainer of a floor drain or the opening of a standpipe receptor and the trap weir shall not exceed 36".	To be consistant with the provisions within SPS 382.32 (4) (b) 1. the vertical distance is measured from the fixture outlet drain to the trap weir. The Department recommends changing the vertical distance to be measured from the fixture outlet to the trap weir. Presented by: Mike McNally
7c	Amend	SPS 382.32 (4) (b) 1. b.	382.32(4)(b)1.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 not exceed 60".	382.32(4)(b)1.b. The vertical distance between the top of the fixture drain outlet of a pedestal fixture or a cuspidor and the trap weir shall not exceed 60".	To be consistant with the provisions within SPS 382.32 (4) (b) 1. the vertical distance is measured from the fixture outlet drain to the trap weir. The Department recommends changing the vertical distance to be measured from the fixture outlet to the trap weir. Presented by: Mike McNally
7 d	Amend	SPS 382.32 (4) (b) 1. d.	382.32(4)(b)1.d. The vertical distance from 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.	382.32(4)(b)1.d. The vertical distance from the 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 to permit the trap to be installed below the predicted depth of frost.	To be consistant with the provisions within SPS 382.32 (4) (b) 1. the vertical distance is measured from the fixture outlet drain to the trap weir. The Department recommends changing the vertical distance to be measured from the fixture outlet to the trap weir. Presented by: Mike McNally
7e	Delete	SPS 382.32 (4) (b) 1. e.	382.32(4)(b)1.e. The vertical distance of a floor outlet fixture between the top of the fixture drain outlet and the horizontal center line of the trap outlet may not exceed 18 inches.	N/A (Code Language Removed)	SPS 382.32 (4) (b) 1. e. is no longer needs since the provision within SPS 382.32 (4) (b) 1. already increase the vertitical distance to 24". The Department recommends deleting this provision entirely. Presented by: Mike McNally
8a-c		SPS 382.33	382.33 Indirect and local waste piping (7) Air-gaps and air-breaks. All indirect waste piping and all local waste piping shall discharge by means of an air-gap or air-break into a receptor. (a) Air-gap installation. The installation of an air gap shall conform to any of the following requirements: 1. The distance of an air gap shall comply with one of the following: a. The distance of an air gap serving indirect waste piping one inch or less in diameter and a receptor shall be at least fwice the diameter of the indirect waste piping. b. The distance of an air gap between indirect waste piping larger than one inch in diameter and a receptor shall not be less than 2 inches. 2. The installation of all air-gap fittings shall comply with ASME A112.1.3. 3. The installation of a residential dishwashing machine manufactured air gap-shall comply with ASSE 1021 (9) Indirect waste piping required. Indirect waste shall discharge to an approved receptor in accordance with all of the following: (fm) 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: 1. In lieu of individual traps, a single trap may serve multiple threshold drains on a single floor serving a single hoistway. 2. Where multiple elevator threshold drains are served by one trap, an untrapped-threshold drain may serve the eleanout requirements under s. SPS 382.35 (3) (a) and is exempt from s. SPS 382.35 (3) (b). 3. Discharge shall be as specified in Table 382.38 1, line 4m. 4. 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). 5. Elevator threshold drains are exempt from safing requi	382.33 Indirect and local waste piping. (7) Air-gaps and air-breaks. All indirect waste piping and all local waste piping shall discharge by means of an air-gap or air-break into a receptor. (a) Air-gap installation. The installation of an air gap shall conform to any of the following requirements: 1. The distance of an air gap shall comply with one of the following: a. The distance of an air gap serving indirect waste piping one inch or less in diameter and a receptor shall be at least twice the diameter of the indirect waste piping. b. The distance of an air gap between indirect waste piping larger than one inch in diameter and a receptor shall not be less than 2 inches. 2. The installation of all air-gap fittings shall comply with ASME A112.1.3. (9) Indirect waste piping required. Indirect waste shall discharge to an approved receptor in accordance with all of the following: (g) Food handling establishments. Plumbing fixtures, devices, appliances, and appurtenances installed in food handling establishments engaged in the storage, preparation, selling, serving, or processing of food shall be installed in accordance with this paragraph. 1. 'Bar and soda fountain sinks.' A bar sink, whether installed for hand washing or other use, or a soda fountain sink may discharge through indirect waste piping to the sanitary drain system.	
8a	Delete	SPS 382.33 (7) (a) 3.	382.33(7)(a)3. The installation of a residential dishwashing machine manufactured air gap-shall comply with ASSE 1021.	N/A (Code Language Removed)	The ASSE 1021-2001 is an inactive standard. The air gap fitting requirement is covered under SPS 382.33 (7) (a) 3. The Department recommends removing SPS 382.33 (7) (a) 3. Presented by: Ryan Boebel
8b	Delete	SPS 382.33 (9) (fm)	382.33(9)(fm) 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: 1. In lieu of individual traps, a single trap may serve multiple threshold drains on a single floor serving a single hoistway. 2. 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). 3. Discharge shall be as specified in Table 382.38 1, line 4m. 4. 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). 5. Elevator threshold drains are exempt from safing requirements under s. SPS 384.20 (4) (b) 9. 6. 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. 7. Elevator threshold drain traps shall comply with s. SPS 382.32 (3) (e) 1. 8. The drain stack shall be sized to accommodate the anticipated design discharge loads of the automatic fire sprinkler system.	N/A (Code Language Removed)	SPS 382.33 (9) (fm) relates to the installation of elevator threshold drains. SPS 382.33 is specific to indirect and local waste piping. The only situation in which elevator threshold drains fall into local waste piping is when multiple elevator threshold drains are served by one trap. The Department recommends removing the language within SPS 382.33 (9) (fm) and placing the code language into SPS 382.30 Sanitary drain systems. Presented by: Mike McNally
8c	Amend	SPS 382.33 (9) (g) 1.	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 through indirect waste piping to the sanitary drain system through indirect waste piping.	382(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 through indirect waste piping to the sanitary drain system.	The language within SPS 382.33 (9) (g) 1. indicates a bar sink or soda fountain discharge to the sanitary drain system through indirect waste piping. The Department recommends moving 'through indirect waste piping' before 'to the sanitary drain system.' Presented by: Ryan Boebel

10	Amend	SPS 382.35 (3) (k)	382.35 Cleanouts (3) Where required (k) Conductors. Where a cleanout is provided in a conductor, the cleanout shall be located 28 to no more than 60" above the lowest floor penetrated by the conductor.	382.35 Cleanouts (3) Where required (k) Conductors. Where a cleanout is provided in a conductor, the cleanout shall be located no more than 60" above the lowest floor penetrated by the conductor.	SPS 382.35 (3) (f) requires a cleanout on a stack to be located not more than 60 inches above the lowest floor penetrated by the stack. The provision within SPS 382.35 (3) (k) should mimic the same requirement within SPS 382.35 (3) (f). The Department recommends allowing cleanouts for conductors to allow the cleanout to be location 'no more than 60'' above the lowest floor penetrated by the conductor. Presented by: Mike McNally
11a-b		SPS 382.36	SPS 382.36 Stormwater and clearwater plumbing systems (7) Other design requirements (e) Hydrodynamic stormwater separators. Hydrodynamic stormwater separators shall conform to ASTM F1745/F1745m C1745/C1745M (8) Sumps and pumps (b) Pumps 3. `Clearwater discharge.' Clearwater may not discharge into a stormwater sump, except for one- and 2-family dwellings and sumps located in elevator pits.	SPS 382.36 Stormwater and clearwater plumbing systems (7) Other design requirements (e) Hydrodynamic stormwater separators. Hydrodynamic stormwater separators shall conform to ASTM C1745/C1745M (8) Sumps and pumps (b) Pumps 3. `Clearwater discharge.' Clearwater may not discharge into a stormwater sump, except for one- and 2-family dwellings and sumps located in elevator pits.	
11a	Amend	SPS 382.36 (7) (e)	382.36(7)(e) Hydrodynamic stormwater separators. Hydrodynamic stormwater separators shall conform to ASTM F1745/F1745m <u>C1745/C1745M</u> .	382.36(7)(e) Hydrodynamic stormwater separators. Hydrodynamic stormwater separators shall conform to ASTM C1745/C1745M.	SPS 382.36 (7) (e) sites hydrodynamic stormwater separators to conform to ASTM F1745/F1745m. The actual standard is ASTM C1745/C1745M. The Department recommends changing the code citation from 'ASTM F1745/F1745m' to 'ASTM C1745/F1745M.' Presented by: Mike McNally
11b	Amend	SPS 382.36 (8) (b) 3.	382.36(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 pits.	382.36(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 pits.	382.36 (8) (b) 3. states the only exception to allowing clearwater to discharge to a stormwater sump is in one-and 2-family dwellings. There is an exception to allow clearwater to drain to sumps located in elevator pit drains per SPS 382.33 (9) (f) 5. and SPS 382.36 (8) (a) 2. c. The Department recommends adding sumps located in elevator pits as an exception. Presented by: Ryan Boebel
12a-b		SPS 382.40 (5)	382.40 Water supply systems (5) Hot water supply systems. (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). (am) Tankless type water heaters. All tankless type water heaters shall have minimum flow rate as specified in this paragraph. 1. The minimum flow rate of a tankless type water heater may be obtained by multiplying 0.65 by the calculated hot water gallons per minute demand, as determined by Tables 382.40 -1 t and 382.40 -3, provided the heater will achieve a water temperature of 110°F at the terminal fitting or faucet. 2. The sizing method in subd. 1. may not be used for sizing a water heater serving a high flow fixture, a hose bibb, a hydrant, or a fixture that is required to have a supply line with a diameter larger than 1/2 inch. 3. For the purposes of subd. 2, "high flow fixture" means a fixture with a flow rate of more than 4 gallons per minute, at 80 pounds per square inch, and a water velocity not exceeding 8 feet per second.	382.40 Water supply systems (5) Hot water supply systems. (a) General. Water heating systems shall be sized to provide sufficient hot water to supply peak demand	
12a	Amend	SPS 382.40 (5) (a)	382.40(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).	382.40 Water supply systems (5) Hot water supply systems. (a) General. Water heating systems shall be sized to provide sufficient hot water to supply peak demand	SPS 382.40 (5) (a) designates that all water heating systems shall be sized to provide hot water to supply peak demand. The sizing of tankless water heaters are being proposed to be moved to SPS 382.40 (6). The Department recommends removing the sizing portion of tankless water heaters. Presented by: Mike McNally
12b	Delete	SPS 382.40 (5) (am)	382.40 (5)(am) Tankless type water heaters. All tankless type water heaters shall have minimum flow rate as specified in this paragraph. 1. The minimum flow rate of a tankless type water heater may be obtained by multiplying 0.65 by the calculated hot water gallons per minute demand, as determined by Tables 382.40. It and 382.40. 3, provided the heater will achieve a water temperature of 110°F at the terminal fitting or faucet. 2. The sizing method in subd. 1, may not be used for sizing a water heater serving a high-flow fixture, a hose bibb, a hydrant, or a fixture that is required to have a supply line with a diameter larger than 1/2 inch. 3. For the purposes of subd. 2, "high-flow fixture" means a fixture with a flow rate of more than 4 gallons per minute, at 80 pounds per square inch, and a water velocity not exceeding 8 feet per second.	N/A (Code Language Removed)	The sizing of tankless water heaters are being proposed to be moved to SPS 382.40 (6) since the sizing of the tankless water heater is determing the "load of the water supply system." The Department recommends removing the sizing portion of tankless water heaters from SPS 382.40 (5) and placing it in SPS 382.40 (6). Presented by: Mike McNally
13a-b		SPS 382.40 (6)	382.40 Water supply systems (6) Load factors for water supply systems (7) Water heating sizing alternate approval Storage tank water heater sizing alternative. The load factor for an individual storage tank water heater serving an individual residence, apartment, living unit of a hotel or motel, and similar places where plumbing fixtures are intended for use by an individual or family, to the exclusion of all others, may be calculated as follows: 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 ealculated in accordance with Table as determined by Tables 382.40-1b by a factor of 0.65 and 382.40-3, provided the heater will achieve a water temperature of 110°F at the terminal fitting or faucet. 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 minimum draw time. 3. The flow rate for tankless type water heaters shall be based on a temperature increase that will provide 110°F at the most remote terminus. 4. This alternate sizing method may not be applied to any of the following: a. Water heaters serving high flow fixtures, hose bibs, hydrants or fixtures requiring 1/2 inch 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. b. Sizing hot water distribution piping. c. Exceeding a water heater manufacturer's specifications. (d) Instantaneous water heater sizing alternative, All tankless type instantaneous water heater shall have minimum flow rate as specified in this paragraph. 1. The minimum flow rate of a tankless type an instantaneous water heater may be obtained by multiplying 0.65 by the calculated hot water gallons per minute demand, as determined by Tables 382.40-13 and 382.40-3, provided the heater will achieve a water temperature of 110°F at the terminal fitting or faucet. 2. This alternative sizing method may not be appl	382.40 Water supply systems (6) Load factors for water supply systems (c) Storage tank water heater sizing alternative. The load factor for an individual storage tank water heater serving an individual residence, apartment, living unit of a hotel or motel, and similar places where plumbing fixtures are intended for use by an individual or family, to the exclusion of all others, may be calculated as follows: 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 as determined by Tables 382.40-1b and 382.40-3, provided the heater will achieve a water temperature of 110°F at the terminal fitting or faucet. 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 minimum draw time. 4. This alternate sizing method may not be applied to any of the following: a. Water heaters serving high flow fixtures, hose bibs, hydrants or fixtures requiring 1/2 inch 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. b. Sizing hot water distribution piping. c. Exceeding a water heater manufacturer's specifications. (d) Instantaneous water heater sizing alternative. All tankless type instantaneous water heaters shall have minimum flow rate as specified in this paragraph. 1. The minimum flow rate of a tankless type an instantaneous water heater may be obtained by multiplying 0.65 by the calculated hot water gallons per minute demand, as determined by Tables 382.40-11 382.40-15 and 382.40-3, provided the heater will achieve a water temperature of 110°F at the terminal fitting or faucet. 2. This alternative sizing method may not be applied to any of the following: a. Instantaneous water heaters serving high flow fixtures, hose bibbs, hydrants or fixtures requiring a supply line with a diameter larger than 1/2 inch. High flow fixtures are fixtures with flow rates gre	

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13a	Amend	SPS 382.40 (6) (c)	382.40(6)(c) Water heating sizing alternate approval Storage tank water heater sizing alternative. The load factor for an individual storage tank water heater serving an individual residence, apartment, living unit of a hotel or motel, and similar places where plumbing fixtures are intended for use by an individual or family, to the exclusion of all others, may be calculated as follows: 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 Table as determined by Tables 382.40-1b by a factor of 0.65 and 382.40-3, provided the heater will achieve a water temperature of 110°F at the terminal fitting or faucet. 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 minimum draw time. 3. The flow rate for tankless type water heaters shall be based on a temperature increase that will provide 110°F at the most remote terminus. 4. This alternate sizing method may not be applied to any of the following: a. Water heaters serving high flow fixtures, hose bibs, hydrants or fixtures requiring 1/2 inch 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. b. Sizing hot water distribution piping. c. Exceeding a water heater manufacturer's specifications.	382.40(6)(c) Storage tank water heater sizing alternative. The load factor for an individual storage tank water heater serving an individual residence, apartment, living unit of a hotel or motel, and similar places where plumbing fixtures are intended for use by an individual or family, to the exclusion of all others, may be calculated as follows: 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 as determined by Tables 382.40-1b and 382.40-3, provided the heater will achieve a water temperature of 110°F at the terminal fitting or faucet. 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 minimum draw time. 4. This alternate sizing method may not be applied to any of the following: a. Water heaters serving high flow fixtures, hose bibs, hydrants or fixtures requiring 1/2 inch 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. b. Sizing hot water distribution piping. c. Exceeding a water heater manufacturer's specifications.	The water heating sizing alternate approval language within SPS 382.40 (6) (c) has several changes. The phrase 'storage tank' was added to the phrase 'water heater' since the applicable standards use the phrase 'storage tank water heaters.' The sizing factors for storage tank water heaters follow the same sizing requirements as tankless water heaters. The Department recommends revising SPS 382.40 (6) (c) to add 'storage tank' in front of 'water heater' and modifiy the sizing requirements to mimic the tankless water heater sizing requirements. Presented by: Mike McNally
13b	Create new	SPS 382.40 (6) (d)	382.40(6)(d) Instantaneous water heater sizing alternative. All instantaneous water heaters shall have minimum flow rate as specified in this paragraph. 1. The minimum flow rate of an instantaneous water heater may be obtained by multiplying 0.65 by the calculated hot water gallons per minute demand, as determined by Tables 382.40—11 382.40—1b and 382.40—3, provided the heater will achieve a water temperature of 110°F at the terminal fitting or faucet. 2. This alternative sizing method may not be applied to any of the following: a. Instantaneous water heaters serving high flow fixtures, hose bibbs, hydrants or fixtures requiring a supply line with a diameter larger than 1/2 inch. 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. b. Sizing hot water distribution piping. c. Exceeding a water heater manufacturer's specifications.	382.40(6)(d) Instantaneous water heater sizing alternative. All instantaneous water heaters shall have minimum flow rate as specified in this paragraph. 1. The minimum flow rate of an instantaneous water heater may be obtained by multiplying 0.65 by the calculated hot water gallons per minute demand, as determined by Tables 382.40–11 382.40–1b and 382.40–3, provided the heater will achieve a water temperature of 110°F at the terminal fitting or faucet. 2. This alternative sizing method may not be applied to any of the following: a. Instantaneous water heaters serving high flow fixtures, hose bibbs, hydrants or fixtures requiring a supply line with a diameter larger than 1/2 inch. 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. b. Sizing hot water distribution piping. c. Exceeding a water heater manufacturer's specifications.	The sizing of tankless water heaters are being proposed to be moved to SPS 382.40 (6) (d) since the sizing of the tankless water heater is determing the "load of the water supply system." In addition, the applicable standards use the phrase "instantaneous water heater" in lieu of "tankless water heater." The Department recommends removing the sizing portion of tankless water heaters from SPS 382.40 (5) and placing it in SPS 382.40 (6). The Department also recommends changing the phrase "instantaneous water heater" in lieu of "tankless water heater." Presented by: Mike McNally
14a-c		SPS 382.40 (7)	382.40 Water supply systems (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. Note [2]: A system based on an analysis provided by a Wisconsin registered architect, registered professional engineer, or permitted designer of engineering system-plumbing is an example of an engineered system as defined in SPS 381.01 (89). Pursuant to Table SPS 382.20-1 engineered systems may only be evaluated by the department (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 382.40-9 382.40-14 (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).	382.40 Water supply systems (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 public lookup, https://esla.wi.gov/publiclookup for details for alternative methods for sizing of the water supply piping. Note [2]: A system based on an analysis provided by a Wisconsin registered architect, registered professional engineer, or permitted designer of engineering system-plumbing is an example of an engineered system as defined in SPS 381.01 (89). Pursuant to Table SPS 382.20-1 engineered systems may only be evaluated by the department. (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 382.40-14. (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 multipurpose piping system as designed in sub. (3) (e).	
14a	Amend	382.40 (7)	382.40(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.	382.40(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.	A master plumber was added to the list of individuals for which can provide an analysis since a master plumber can design and submit plans based on provision SPS 382.20 (4) (c) 2. Presented by: Mike McNally
14b	Amend	382.40 (7) Note [1]	382.40(7)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.	382.40(7)Note [1]: See public lookup, https://esla.wi.gov/publiclookup for details for alternative methods for sizing of the water supply piping.	The language within SPS 382.40 (7) Note No. 1 informs the reader to proceed to the appendix (SPS 382 Appendix) for details for alternative methods for sizing of the water supply piping. Currently, there is no alternative sizing methods listed in the SPS 382 Appendix; however, there is one alternative sizing method currently as an alternative approval located on the Department's eSLA Public LookUp website. This current alternative sizing method is the IAPMO Water Demand Calculator. The Department recommends changing Note No.1 to redirect the reader to the Department's eSLA Public LookUp website. Presented by: Mike McNally
14c	Create new	382.40 (7) Note [2]	382.40(7)Note[2]: A system based on an analysis provided by a Wisconsin registered architect, registered professional engineer, or permitted designer of engineering system-plumbing is an example of an engineered system as defined in SPS 381.01 (89). Pursuant to Table SPS 382.20-1 engineered systems may only be evaluated by the department.	382.40(7)Note[2]: A system based on an analysis provided by a Wisconsin registered architect, registered professional engineer, or permitted designer of engineering system-plumbing is an example of an engineered system as defined in SPS 381.01 (89). Pursuant to Table SPS 382.20-1 engineered systems may only be evaluated by the department.	The Department recommends adding an additional Note No. 2, which will clarify that an analysis by a Wisconsin registered architect, registered professional engineer or permitted designer of engineering systems – plumbing would fall under the definition of an engineered system per SPS 381.01 (89). Engineered systems are only evaluated by the Department per Table 382.20-1. Presented by: Mike McNally
14d	Amend	SPS 382.40 (7) (c)	382.40(7)(c) <i>Maximum loading</i> . The calculated load on any portion of the water distribution system may not exceed the limits specified in Tables 382.40-4 to 382.40-9 382.40-14.	382.40(7)(c) <i>Maximum loading.</i> The calculated load on any portion of the water distribution system may not exceed the limits specified in Tables 382.40-4 to 382.40-14.	SPS 382.40 (7) (c) was updated to include Tables 382.40-10 through 14. The Department recommends updating the language within this provision to reflect the additional tables. Presented by: Mike McNally
14e	Amend	SPS 382.40 (7) (e)	382.40(7)(e) <i>Maximum velocity.</i> 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).	382.40(7)(e) <i>Maximum velocity.</i> A water distribution system shall be designed so that the flow velocity does not exceed 8 feet per second except for a multipurpose piping system as designed in sub. (3) (e).	The reference to combination sprinkler distribution has caused confusion with plumbing plan submitters especially out of State submitters. The change is to clarify a combination sprinkler distrubtion system is a 'multipurpose pipin system,' which is defined in SPS 381. The Department recommends changing the words 'combination sprinkler distribution' to a 'multipurpose piping system.' Presented by: Mike McNally

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15a-e		SPS 382.40 (8)	382.40 Water supply systems. (8) Installation. (b) Location 10. Private water mains shall be provided with provisions for flushing of the system at a minimum of 10 feet per second until clear. Note: See SPS 382.40(8)(i)2. for further explanatory information. (d) Water distribution piping. 3. Except where parallel water meters are installed, water distribution piping shall be provided to bypass a water meter 1½ " or larger. a. Except where parallel water meters are installed, water distribution piping shall be provided to bypass a water meter 1½ " or larger. b. The minimum diameter of water distribution piping serving as a meter bypass shall be one nominal pipe size smaller than the meter. Water distribution piping serving as a meter bypass shall be of the same material and shall be equal to or one nominal pipe size smaller than the water distribution piping immediately downstream of the meter. (i) Flushing and disinfection of potable water supply systems. 3. The department may require a water quality analysis to be done for a new or repaired water supply system. The analysis shall be performed in accordance with acceptable nationally recognized laboratory practices. If the water supply system has been disinfected, water samples for the analysis may not be taken sooner than 24 hours after disinfection. Note: See s. SPS 384.30 (1) regarding the bending of pipe and protection from puncture.	382.40 Water supply systems. (8) Installation. (b) Location (d) Water distribution piping 3. Except where parallel water meters are installed, water distribution piping shall be provided to bypass a water meter 1½ " or larger (i) Flushing and disinfection of potable water supply systems.	
15a	Amend	SPS 382.40 (8) (b) 10.	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. Note: See SPS 382.40(8)(i)2. for further explanatory information.	382.40(8)(b)10. Private water mains shall be provided with provisions for flushing of the system.	The provision within SPS 382.40 (8) (b) 10. should only require private water mains to be provided with provisions for flushing the system and not dictate the minimum requirements to flush the system. The Department recommends removing "at a minimum of 10 feet per second until clear." Presented by: Mike McNally
15b	Create new	SPS 382.40 (8) (d) 3.	382.40(8)(d)3. Except where parallel water meters are installed, water distribution piping shall be provided to bypass a water meter 1½ " or larger.	382.40(8)(d)3. Except where parallel water meters are installed, water distribution piping shall be provided to bypass a water meter $1\frac{1}{2}$ " or larger.	The language within SPS 382.40 (8) (d) 3. a. should now become the language within SPS 382.40 (8) (d) 3. The Department recommends eliminates SPS 382.40 (8) (d) 3. a. and move it to SPS 382.40 (8) (d) 3. Presented by: Ryan Boebel
15c	Delete	SPS 382.40 (8) (d) 3. a.	382.40(8)(d)3.a. Except where parallel water meters are installed, water distribution piping shall be provided to bypass a water meter 1½ " or larger.	N/A (Code Language Removed)	The language within SPS 382.40 (8) (d) 3. a. should now become the language within SPS 382.40 (8) (d) 3. The Department recommends eliminates SPS 382.40 (8) (d) 3. a. and move it to SPS 382.40 (8) (d) 3. Presented by: Ryan Boebel
15d	Delete	SPS 382.40 (8) (d) 3. b.	382.40(8)(d)3.b. The minimum diameter of water distribution piping serving as a meter-bypass shall be one nominal pipe size smaller than the meter. Water distribution piping serving as a meter bypass shall be of the same material and shall be equal to or one nominal-pipe size smaller than the water distribution piping immediately downstream of the meter.	N/A (Code Language Removed)	The language within SPS 382.40 (8) (d) 3. b. allows the bypass piping around a meter to be one pipe size smaller than the water distribution piping. This code section is covered in SPS 382.40 (7). The Department recommends removing this section entirely. Presented by: Ryan Boebel
15e	Delete	SPS 382.40 (8) (i) 3.	382.40(8)(i)3. The department may require a water quality analysis to be done for a new or repaired water supply system. The analysis shall be performed in accordance with acceptable nationally recognized laboratory practices. If the water supply system has been disinfected, water samples for the analysis may not be taken sooner than 24 hours after disinfection. Note: See s. SPS 384.30 (1) regarding the bending of pipe and protection from puncture.	382.40(8)(i)3. The department may require a water quality analysis to be done for a new or repaired water supply system. The analysis shall be performed in accordance with acceptable nationally recognized laboratory practices. If the water supply system has been disinfected, water samples for the analysis may not be taken sooner than 24 hours after disinfection.	The Note within SPS 382.40 (8) (i) 3. is regarding bending of pipe and protection from puncture, which has no direct relation to a water quality analysis for flushing and disinfecting potable water supply systems. The Department recommends removing the Note within SPS 382.40 (8) (i) 3. Presented by: Mike McNally
16	Delete	SPS 382.50 (3) (b) 10.	382.50 Health care and related facilities. (3) Water supply systems. (b) Hospital, community-based residential facility, inpatient hospice and nursing home water supply systems. 10. Any portion of the water distribution system terminating by means of a plug, eap, or closed fitting and dry downstream with no outlet within the water distribution system may not exceed 6 pipe diameters.	N/A (Code Language Removed)	The provision within SPS 382.50 (3) (b) 10. is not needed since the water distribution system within any occupancy must not have any portion of the water distribution system terminating by means of a plug, cap, or closed fitting and dry downstream with no outlet may not exceed 6 pipe diameters as specified in SPS 382.40 (8) (d) 10. The Department recommends removing SPS 382.50 (3) (b) 10. entirely. Presented by: Mike McNally
17	Amend	SPS 384.11	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 s. 381.20(3). 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 s. 381.20(3), or achieve code compliance via Alternate or Experimental approvals in accordance with s. SPS 384.50 or s. 381.20(2).	SPS 384.11 Appurtenance, device, fixture, material, and method listings. Appurtenances, devices, fixtures, materials and methods shall conform to the referenced standard in s. 381.20(3), or achieve code compliance with s. 384.50 or s. 381.20(2).	Table 384.11 is a listing of all standards already adopted under SPS 381.20 (3). The Department recommends deleting Table 384.11 entirely since the standards are already listed in the tables under SPS 381.20 (3). Presented by: Mike McNally
18a-b		SPS 384.20	384.20 Plumbing fixtures, appliances and equipment (5) Plumbing fixtures and plumbing appliances (d) Chemical dispensing systems. Chemical dispensing systems shall conform to ASSE 1055 ANSI/CAN/ASSE/IAPMO 1055 (f) Drinking fountains. 1. Drinking fountains and water coolers shall conform to ARI 1010 or ASME A112.19.2/CSA B45.1, ASME A112.19.3/CSA B45.4, or ASME A112.19.4M.	384.20 Plumbing fixtures, appliances and equipment (5) Plumbing fixtures and plumbing appliances (d) Chemical dispensing systems. Chemical dispensing systems shall conform to ANSI/CAN/ASSE/IAPMO 1055 (f) Drinking fountains. 1. Drinking fountains and water coolers shall conform to ASME A112.19.2/CSA B45.1, ASME A112.19.3/CSA B45.4, or ASME A112.19.4M.	
18a	Amend	SPS 384.20 (5) (d)	384.20(5)(d) Chemical dispensing systems. Chemical dispensing systems shall conform to ASSE 1055 ANSI/CAN/ASSE/IAPMO 1055.	384.20(5)(d) Chemical dispensing systems. Chemical dispensing systems shall conform to ANSI/CAN/ASSE/IAPMO 1055.	ASSE 1055 is not the correct name of the standard. The Department recommends chaning the 'ASSE 1055' to 'ANSI/CAN/ASSE/IAPMO 1055' for SPS 384.20 (5) (d). Presented by: Mike McNally
18b	Amend	SPS 384.20 (5) (f) 1.		384.20(5)(f)1. Drinking fountains and water coolers shall conform to ASME A112.19.2/CSA B45.1, ASME A112.19.3/CSA B45.4, or ASME A112.19.4M.	ARI 1010 is a repealed standard. The Department recommends replacing ARI 1010 with ASME A112.19.2/CSA B45.1, ASME A112.19.3/CSA B45.4, or ASME A112.19.4M. Presented by: Mike McNally

19	Amend	SPS 384.30 (3) (e) 3.	384.30 Plumbing materials (3) Storm and clear water drain and vent systems. Storm and clear water drain and vent systems shall be of such material and workmanship as set forth in this subsection (e) Roof drains 3. Roof drains shall be sized in accordance with s. SPS 382.36 and the drain outlet may not be less than 2 inches in diameter. Note: See s. SPS 382.36 (10) and (11) for additional roof drain requirements.	(3) Storm and clear water drain and vent systems. Storm and clear water drain and vent systems shall be of such material and workmanship as set forth in this subsection (e) Roof drains	The language within the Note under SPS 384.30 (3) (e) 3. references SPS 382.36 (11). SPS 382.36 (11) no longer exists. The Department recommends removing SPS 382.36 (11) from the Note under SPS 384.30 (3) (e) 3. Presented by: Mike McNally
20	Amend	SPS 384.40 (9) (a)	384.40 Joints and connections (9) Ductile iron pipe. (a) Mechanical joints. Mechanical push-on joints and mechanical compression type joints for water supply systems shall conform to AWWA CHI CIII/A21.11. Lead tipped gaskets may not be used.	384.40 Joints and connections (9) Ductile iron pipe. (a) Mechanical joints. Mechanical push-on joints and mechanical compression type joints for water supply systems shall conform to AWWA C111/A21.11. Lead tipped gaskets may not be used.	Standard AWWA C111 is properly titled AWWA C111/A21.11. The Department recommends changing the title of the standard within SPS 384.40 (9) (a). Presented by: Mike McNally