

Meeting Minutes: Ad-Hoc Code Review & Rulemaking Committee

Date: March 29, 2019
Time: 9:00 a.m.
Location: Minnesota Room, Department of Labor and Industry
443 Lafayette Road No., St. Paul, MN 55117-4344

Committee Members Present

Richard Becker
John Flagg
Mike Herman
Rick Jacobs (chair)
Cathy Tran

Committee Members Absent

None

DLI Staff & Visitors

Suzanne Todnem, General Counsel (DLI)
Brad Jensen (DLI)
Jim Peterson (DLI)
A.J. Schwidder (Upstream Technologies)
Stephanie Menning (MN Utility Contractors)
Gary Thaden (MMCA)
Bob Moore (Contech)
David Radziej (Metro PHCC)
Aaron Ganson (ADS)
Kyle Sytsma (Major Mechanical)
Trevor Ogilvie (City of Minneapolis)
Rex Ollenburg (Advanced Drainage Systems)
Ken Loucks (IW Consulting) - via teleconference
Ruth Thompson (My Plumbing Training) – via teleconference
Larry Justin – via teleconference

1. Call to Order

The meeting was called to order by Chair Jacobs at 9:07 a.m. Introductions and housekeeping announcements were made. Attendance was taken; a quorum was met with 5 of 5 members present.

2. Approval of meeting agenda

A motion was made by Becker, seconded by Flagg, to approve the Agenda as presented. The vote was unanimous with 5 votes in favor; the motion carried.

3. Approval of previous meeting minutes

A motion was made by Herman, seconded by Becker, to approve the 3/11/2019 draft minutes, as presented. The vote was unanimous with 5 votes in favor; the motion carried.

4. Regular Business

Approval of Expense Reports – Chair will approve expenses presented at the meeting.

5. Special Business

Discuss chapters 8, 9, 10, 11, 13, 15, 16, and 17 of the 2018 Uniform Plumbing Code (UPC), and appendices A, B, C, E, and I, of the 2018 UPC as time permits; discuss possible rulemaking recommendation to the Plumbing Board.

CHAPTER 10

RFA - PB0112 Proposal: Amend section 1017.2 - Design of Interceptors

The Committee began discussion of this RFA at the previous meeting. Discussion was tabled to gather more information and resumed at this meeting. Summary: Submitter, Mike Johnson, requested that the requirement that the Authority Having Jurisdiction (AHJ) determines the size of oil inflammable waste interceptors for the listed spaces above 10 vehicles be removed. Submitter did not provide proposed language.

Some of the listed reasons:

- The Board should establish means and standards for sizing interceptors for more than 10 vehicles.
- There is no consistency amongst AHJs on how these interceptors are being sized and no information is given to them to help determine size
- Wait has been up to two months to get direction from AHJ and waiting for response from AHJ can cause delays and structural issues

Proposed new subsection language from the Committee to the Board regarding Chapter 1017.2:

Recommendation: Amend section 1017.2 and add subsection 1017.2.1, which will read:

“...and shall have a minimum capacity as follows: Where not more than three motor vehicles are serviced, stored, or both, interceptors shall have a minimum capacity of 6 cubic feet and 1 cubic foot of capacity shall be added for each vehicle up to 10 vehicles. Above 10 vehicles, each interceptor shall be not less than 35 cubic feet holding capacity. ~~and the Authority Having jurisdiction shall determine the size of the inceptor required.~~

1017.2.1. Maintenance. Service and maintenance records shall be kept by the owner and available for viewing to the Authority Having Jurisdiction upon request. The service and maintenance records shall demonstrate periodic removal of accumulated substances in the oil and flammable liquid interceptor based on the interceptor’s capacity and as required by the manufacturer’s recommended maintenance instructions. Where the Authority Having Jurisdiction determines that an interceptor is not being properly cleaned or maintained, the Authority Having Jurisdiction shall have the authority to mandate a maintenance program.

The Committee set 35 cubic feet holding capacity as the minimum for above 10 vehicles based on the previous code requirement and because, based on the collective experience of the Committee members and public participants, 35 cubic feet is generally a sufficient size. The Committee wants to balance a performance-

based code and prescriptive clarity. The proposed amendment is intended to find that balance. One public commenter stated that the 35 cubic feet will be sufficient probably 95% of the time and the other 5% of the time will entail a unique situation and that he supports establishing this minimum size.

Adding subsection 1017.2.1 is a logical way to address the maintenance issue discussed. Interceptors need to be emptied and the sizing of the interceptor and the use will determine the frequency of interceptor maintenance/emptying. One challenge is that sometimes ownership or management of facilities change and the new owners or managers are not aware of the interceptor. Because maintenance is so important to safety, the Committee recommends some oversight of maintenance records.

RFA - PB0126 Proposal: Add ASTM standards (F949 and F2562) to Table 701.1

Submitter, Robert Moore, presented the RFA to the Committee. The Committee reviewed the RFA and attachments. After discussion about the standards and Moore's presentation and answering questions, the Committee determined they needed to see the actual standards that Moore would like added to Table 701.1. The standards were not included as part of the RFA submission.

RFA was determined by the Committee to be incomplete. The Committee suggested Moore could resubmit a complete RFA. In particular, the Committee needs copies of the standards with copyright permission.

RFA – PB0131 Proposal: various chapter 8 amendments

Recommendation: The Committee recommends the following proposed amendments to Chapter 8 sections as follows:

- *Proposal: amend current rule part **4714.0813 SWIMMING POOLS.***

*813.1 **General.** Pipes carrying wastewater from swimming or wading pools, including pool drainage and backwash from filters, water from scum gutter drains and pool deck drains, shall be installed as an indirect waste. Pool deck drains need not be trapped and vented per Section 803.13, and deck-drain piping must be pitched at minimum of 1/8 inch per foot for pipe sizes 3 inches and larger piping. Where a pump is used to discharge waste pool water to the drainage system, the pump discharge shall be installed as an indirect waste."*

The goal is to provide clarification because pool deck drains are considered indirect waste. Section 803.1 has been renumbered to 803.3 in the 2018 UPC so that additional modification is added here. Due to space around pools, 1/8 inch pitch is reasonable.

- **Proposal: Amend 810.1 Steam and Hot Water Drainage Condensers and Sumps as indicated below and delete sections 810.1 (remaining) to 814.1.**

~~810.1 High Temperature Discharge No steam pipe shall be directly connected to a plumbing or drainage system, nor shall water having a temperature above 140° F(60° C) be discharged under pressure directly into a drainage system. Pipes from boilers shall discharge by means of indirect waste piping, as determined by the Authority Having Jurisdiction or the boiler manufacturer's recommendations. Such pipes shall be permitted to be indirectly connected by discharging into an open or closed condenser or an intercepting sump of an approved type that will prevent the entrance of steam or such water under pressure into the drainage system. Closed condensers or sumps shall be provided with a vent that shall be taken off the top and extended separately, full size above the roof. Condensers and sumps shall be properly trapped at the outlet with a deep seal trap extending to within 6 inches (152 mm) of the bottom of the tank. The top of the deep seal trap shall have a ¾ of an inch (19.1 mm) opening located at the highest point of the trap to serve as a siphon breaker. Outlets shall be taken off from the side in such a manner as to allow a waterline to be maintained that will permanently occupy not less than one half the capacity of..."~~

Steam and hot water drainage condensers and sumps are covered in the mechanical code. The deleted language is addressed in the mechanical code. The language that is not deleted addresses steam pipes only as they apply to plumbing or drainage systems and therefore fall under plumbing.

RFA – PB0130 Proposal: adopt Section 905.3 of the 2018 UPC in its entirety to replace the Minnesota amendment to section 905.3 in rule part 4714.0905.

UPC language includes, “[u]nless prohibited by structural conditions, each vent rise....” What is meant by “structural conditions” is vague. Concern that other fixtures will be allowed to be flat vented. As applied to floor drains, the language is acceptable but this applies to more than just floor drains. Or possibly this should be an exception available only if absolutely necessary, which would result in vague use. The intent was for floor drains but as written, it is for all fixtures. The 2018 UPC language also eliminates the need for the 25-foot rule (which is no longer part of the Minnesota Plumbing Code). Some industry professionals want the 25-foot rule back in the Plumbing Code.

The Committee agreed to move the request forward to the Board with no recommendation.

RFA – PB0120 Proposal: add language to section 1009.3.

Submitter, Arthur Schwidder, requested to add the following language to 1009.3:

“Interceptors (clarifiers) using vertical baffles, either solid or perforated, shall maintain a minimum horizontal distance of 18 inches between the nearest inlet pipe and a vertical baffle.”

Schwidder showed online videos of correct and incorrect baffle installations. After discussion of the RFA, the Committee concluded that Chapter 10 might not be the appropriate section, and Chapter 11 might be a better place for this language. The Committee asked Schwidder to consider the Committee's discussion and determine the appropriate chapter for this language. Schwidder withdrew the RFA and will submit a new RFA.

RFA – PB0089 Proposal: various.

Submitter, Cathy Tran, withdrew her request regarding Chapter 10, Section 1014.2 due to the fact the UPC 2018 has adopted the standard in the request.

Tran requested the following language, as modified at the meeting, be added to Chapter 10:

- Add an exception to the end of **1002.2 Fixture Traps.**
“Exception: Emergency floor drains, tell tail floor drains, and floor drains not used as waste receptors installed within 25 feet of a vented branch or main.”

Intent is to remove “floor set fixtures,” which would include toilets. The 25-foot length is proposed here because that was in the previous Minnesota Plumbing Code and has been and is a common industry standard. There is also interest in keeping modifications to the UPC to a minimum.

- Add an exception to the end of **1006.1 General.**
“Exception: Floor drains or trench drains which connect to sand interceptors or oil and flammable liquid interceptors do not need to be trapped.”

Committee discussion that this exception should be stronger and say that these floor drains “shall not be trapped.” Concern that there is a fire hazard without the trap.

- Amend section **1016.4 Separate Use:**
“Sand and similar interceptors for every solid shall be so designed and located as to be readily accessible for cleaning, ~~shall~~ have a water seal of not less than 6 inches (152mm), and ~~shall~~ be vented.
Exception: Sand interceptors connecting to oily and flammable liquid interceptors meeting the requirements of Section 1017.0 do not require a water seal or vent.”

A water seal is required on every design; the proposal adds an exception. The Committee modified the proposed amendment as indicated by strikethrough and highlighted text.

- Amend **1017.1 Interceptors Required.** *“Repair garages and gasoline stations with grease racks or grease pits, parking garages over 1000 square feet, vehicle wash facilities, and factories that have oily, flammable, or both types of wastes as a result of manufacturing, storage, maintenance, repair, or*

testing processes, shall be provided with an oil or flammable liquid inteceptor that shall be connected to necessary floor drains. The separation or vapor compartment shall be independently vented to the outer air. Where two or more sparation or vapor compartments are used, each shall be vented to the outer air or shall be permitted to connect to a header that is installed at a minimum of 6 inches (152mm) above the spill line of the lowest floor drain and vented independently to the outer air. The minimum size of a flammable vapor vent shall not be less than two inches (51 mm), and, where vented through a sidewall, the vent shall be not less than 10 feet (3048 mm) above the adjacent level at an approved location. The interceptor shall be vented on the sewer side and shall not connect to a flammable vapor vent. Oil and flammable interceptors shall be provided with gastight cleanout covers that shall be readily accessible. Drains discharging into interceptors must not be designed to retain liquid waste. The waste line shall be not less than 3 inches (80 mm) in diameter with a full-size cleanout to grade. Where an interceptor is provided with an overflow, it shall be provided with an overflow line [not less than 2 inches (50 mm) in diameter] to an approved waste oil tank having a minimum capacity of 550 gallons (2082 L) and meeting the requirements of the Authority Having Jurisdiction. The waste oil from the separator shall flow by gravity or shall be pumped to a higher elevation by an automatic pump. Pumps shall be adequately sized and accessible. Waist oil tanks shall have a 2 inch (50 mm) minimum pumpout connection at grade and a 1 ½ inch (38 mm) minimum vent to atmosphere at an approved location not less than 10 feet (3048 mm) above grade.”

Vehicle wash facilities is added to coordinate this section with section 418.7, which requires AHJ approval, and section 1009.1. Currently, there are inconsistent interceptor requirements from AHJ to AHJ. The proposed amendment would be helpful to plan review and for regulated parties because it provides clarity. The 1,000 square feet is proposed because that was the threshold in the previous Plumbing Code and is therefore a familiar measurement. The second proposed addition is necessary to clarify drains discharging into interceptors “must be designed not to retain liquid waste” to prevent flammables and oily wastes from sitting in the drains for areas that have vehicles storage parking producing hazardous waste. Drains that are not designed to drain dry will hold flammable and oily waste and pose hazardous and unsafe conditions.

The Committee agreed to recommend these proposed amendments to Chapter 10 as modified above.

RFA – PB0123 Proposal: create a table in Chapter 11 and add referenced standards to the table, or add the referenced standards to Table 701.2.

Submitter, Aaron Ganson, requested the creation of a building storm sewer table in Chapter 11 of qualified materials for storm water management and drainage.

The Committee discussed the inclusion of F2306, C76, D3212, F2881 and C1628 in Table 701.2 and exclusion of F2648 from the same table. The Committee already discussed at the March 11, 2019, meeting and reviewed C76 in relation to another RFA (PB0119) and will recommend approval to the Board. F2306 was approved in the previous Minnesota Plumbing Code prior to adoption and amendment of the 2012 UPC. Committee is inclined to recommend F2306 be added back in to the Minnesota Plumbing Code. Committee continued discussion of the remaining standards. Some of the materials covered by the remaining standards are approved as an alternate method.

The committee agreed to table discussion of RFA – PB0123 until the next meeting.

6. Adjournment

A motion to adjourn by Becker , seconded by Tran. The vote was unanimous with 4 votes; the motion carried.

Respectfully submitted,

John Flagg

John Flagg