

**Plumbing Board  
Meeting Minutes  
Tuesday, April 20, 2010 at 9:30 a.m.  
Minnesota Room  
Department of Labor & Industry  
443 Lafayette Road N, St Paul, MN 55155  
[DLI.CCLDBOARDS@State.MN.US](mailto:DLI.CCLDBOARDS@State.MN.US)**

**Members Present:**

Karl Abrahamson  
Rebecca L. Ames  
Jim Gander  
Lawrence G. Justin  
Kenneth Kammerer  
James Kittelson  
Allen J. Lamm  
Jim Lungstrom  
(DLI Commissioner's designee)  
Rick Palmateer  
John A. Parizek  
Paul Sullwold  
Ronald Thompson  
(MDH Commissioner's designee)

**Member by Phone:**

Michael McGowan

**Member Absent:**

Steve Christenson

**Staff Present:**

Mary Miller  
Jim Peterson  
Cathy Tran  
Sandy Arndt

**Visitors Present:**

Brian Soderholm  
Silvano Ferrazzo  
Matthew Marciniak  
Kevin Hamel  
Katie Renner  
Steve Traut  
Dave Bokelman  
Danny Nubbe  
Denny Kopp  
Brad Barrott  
Chip Ruppert  
Mike Rau  
David Cooper  
Tom Hamel  
Charles Olson  
Kevin Campana  
Phil Raines  
Laura Millberg  
Luke Westman  
Dave Schulenberg  
Kevin Hoppe

**Visitors by Phone:**

Danny Gleiberman  
Chris Mueller

**I. Call To Order**

The meeting was called to order by Parizek at 9:50 a.m.

- A. Announcements
- B. Introductions

## **II. Approval of Agenda**

Parizek added an item to the agenda under: VI. Special Business, D) Committee Formation and Appointments, iii National Code Committee.

Gander made a motion, seconded by Lamm, to approve the meeting agenda.

The vote was unanimous and the motion carried.

## **III. Approval of Previous Meeting Minutes**

- A. Tuesday, March 16, 2010 Minutes
  - i. Sullwold made a motion, seconded by Lamm, to approve the March 16, 2010 meeting minutes.  
Parizek, Abrahamson, Lamm, Palmateer, Kittelson, Kammerer, Sullwold, Ames, Lungstrom and McGowan, voted yes.  
Abstention by Justin.  
Motion carries.

## **IV. Regular Business**

- A. Approval of Expense Reports
  - i. Chair stated that he had reviewed the expense reports and Per Diems and found them in order and declared them approved.

## **V. Committee Reports**

- A. Executive Committee
  - i. The Executive Committee met prior to the Plumbing Board this morning and assigned new RFA's: the PCRC received the *PB0046* submitted by Alvin Kreutz dealing with standards in the plumbing code requesting that standards for certain products be listed in the plumbing code; *PB0047* submitted by Carl Crimmins dealing with plumbing instillation of solar panels when they are used to heat potable hot water; *PB0048* submitted by Bill Klapproth dealing with the prohibition of water powered sump pumps; *PB0050* submitted by Craig Froeter from Froet Industries LLC dealing with roof drain strainers; *PB0051* submitted by Brian Soderholm from the Water Control Corp. requesting the Plumbing Board adopt IAPMO green plumbing and mechanical code specifically with the water reuse rain water reclamation section.
  - ii. A new Committee will be formed *PB0049* submitted Jeff Keogh from the City of Chanhassen requesting the Board adopt the IPC with the MN amendments for the state plumbing code; *PB0052* submitted by Matthew Marciniak from IAPMO

requesting the Board adopt the UPC with the MN amendments and the 2010 green plumbing supplement.

- iii. The Executive Committee also discussed the options the board and its committees have regarding rule making.

B. Product and Code Review Committee

- i. The PCRC met March 23, 2010 and reviewed *PB0041* submitted by Mark Kukendall from EasyFlex they request more information Justin needs to authorize the letter that is sent to the presenter. *PB0042* submitted by Future Tool additional information and clarification was requested and a letter will be sent. *PB0044* submitted by Jay Stenklyft from Siphonic Roof Drains, addition information was requested and coordination with DLI on language and a letter still needs to be sent out. *PB0045* submitted by Paul Dreher from Performance Pipe was not reviewed at the meeting per their request. *PB0037* Grease Interceptors submitted by Charlie Ismert from Schier Products which the Board will be reviewing later today.
- ii. The next meeting is June 15, 2010

C. Code Interpretation Committee

- i. There was nothing to report.

D. Licensing and Registration Committee

- i. There was nothing to report.

E. Water Conditioning Committee

- i. There was nothing to report.

F. Construction Code Committee

- i. There was a March 18, 2010 meeting review 33 bills relating to the construction industry, which are currently with the House and the Senate.

## **VI. Special Business**

A. Minnesota Well Water Association – Dave Schulenberg and Kevin Hoppe from H & H Well Services

Mr. Schulenberg and Mr. Hoppe asked for the Board to assist them in locating agreeable language that they can present to the state representatives regarding the plumbing code and how it directly relates to the water well industry.

- 1.12(b) No license, registration, or bond authorized by sections 326B.42 to 326B.49 shall
- 1.13 be required of a well contractor or limited well/boring contractor licensed and bonded
- 1.14 under section 1031.525 or 1031.531 engaged in the work or business of installing water
- 1.15 service pipe from a well to a pressure tank or water distribution source, or installing a
- 1.16 ~~fixture or valve~~ [Frost free water distribution source with anti-siphon device](#) on the well water service pipe

Through much discussion the Board decided the interested parties should have a meeting to discuss the language and also make a presentation to PCRC.

B. Requests for Action

- i. File *PB0043* (6-17-09) StreamTech Adhesive Joining System, Chris Mueller, Mueller Industries

Justin made a motion, seconded by Lamm to recommend Subp. 6. **Copper Water Tube.** Joints in copper water tubing shall be made either by the appropriate use of approved brass or wrought copper water fittings properly soldered or brazed; by means of approved flared fittings as provided in part 4715.0770; ~~or~~ by means of press type copper and copper alloy fittings on aboveground water distribution copper tubing, sizes 1/2-inch to 4-inch, installed in accordance with IAPMO Standard PS 117-2002; or by means of structural adhesive type copper and copper alloy fittings on aboveground water distribution copper tubing, sizes 1/2-inch to 4-inch, installed in accordance with IAPMO IGC 251-2008.

The language is subject to change.

Justin, Lamm, Palmateer and McGowan, voted yes.

Gander, Abrahamson, Kittelson, Kammerer, Sullwold, Ames, Parizek and Lungstrom, voted no.

Motion failed eight to four.

- ii. File *PB0034* (7-3-08) Nonwater Urinals, Falcon Water free Technologies.

It was suggested that the Board members who originally voted no, Abrahamson, Ames, Sullwold, Kittelson, McGowan, Christenson and Peterson at the July 21, 2008 meeting,

should be polled if to see if this is new information if so than the Board has the legal right to reconsider.

McGowan and Christenson are unavailable Peterson position was replaced by Lungstrom.

Abrahamson and Sullwold considered it not to be new information.

Ames and Kittelson considered it to be new information.

Since it was tied the rest of the Board was polled.

Parizek, Justin, Palmateer and Kammerer considered it not to be new information.

Gander considered it to be new information.

Abstention by Lamm.

Abrahamson made a motion, seconded by Lamm to accept the language on nonwater urinals recommended by staff for the April 20, 2010 Plumbing Board Meeting. **(Exhibit A)**

Parizek, Gander, Abrahamson, Lamm, Palmateer, Kittleson, Kammerer, Sullwold, Ames and Lungstrom, voted yes.

Abstention by Justin.

Motion carried.

- iii. File *PB0037* (1-15-09) Grease Interceptors, Schier Products/Green Turtle

Gander made a motion, seconded by Justin to approve the language that was submitted by the PCRC. **(Exhibit B)**

Parizek, Justin, Gander, Abrahamson, Lamm, Palmateer, Kittelson, Kammerer, Sullwold, Ames and Lungstrom, voted yes.

Motion carried.

## C. DLI Reports

- i. Lungstrom asked for the Boards support to move the following commissioner's rules: 4715.2800, 4715.2810, 4715.2830, 4715.2880, 4715.2890 and 4715.3130 from 4715 to a different chapter which would clarify the Boards jurisdiction.

Abrahamson made a motion, seconded by Ames to table the vote for the department to separate the administrative rules from Chapter 4715. In accordance with Statutes 326B.43, subdivision 1 the Commissioner of Labor & Industry is the Authority for administering the plumbing rules.

Abrahamson made a motion, seconded by Kammerer to approve to allow the commissioner to review reciprocal licensing agreements with North and South Dakota. Parizek, Justin, Abrahamson, Lamm, Palmateer, Kittelson, Kammerer, Sullwold, Ames and Lungstrom, voted yes. Motion carried.

D. Committee Formation and Appointments

i. Medical Gas Committee

Chair-Sullwold

Parizek, Abrahamson, Lungstrom, Gander

ii. Continuing Education Committee

Chair-Abrahamson

Ames, Kittelson, Palmateer, Lungstrom

iii. National Code Review Committee

Chair-Lungstrom

Ames, Kammerer, Justin, Parizek

E. Rule Making

Justin made a motion, seconded by Lamm to move file *PB0037* Grease Interceptors to the rule making process. Parizek, Justin, Abrahamson, Lamm, Palmateer, Kittelson, Kammerer, Sullwold, Ames and Lungstrom, voted yes. Motion carried.

Motion made by Lamm, seconded by Kittelson to authorize the board chair to sign a request for comments for rule making on approved items code amendments up to and including the April 20, 2010 Plumbing Board Meeting.

Parizek, Justin, Abrahamson, Lamm, Palmateer, Kittelson, Kammerer, Sullwold, Ames and Lungstrom, voted yes. Motion carried.

F. Other

There was no other business.

### **VII. Complaints**

There were no complaints presented to the Board.

### **VIII. Open Forum**

There were no questions presented to the Board.

### **IX. Board Discussion**

There was no additional Board discussion.

### **X. Announcements**

- A. Next Regularly Scheduled Meetings:
  - i. Tuesday, July 20, 2010, 9:30 a.m. – Minnesota Room, DLI
  - ii. Tuesday, October 19, 2010, 9:30 a.m. – Minnesota Room, DLI

### **XI. Adjournment**

Abrahamson made a motion, seconded by Lamm, to adjourn the meeting. The vote was unanimous, and the motion passed. The meeting adjourned at 3:24 p.m.

Respectfully Submitted,

*Jim Gander*

Jim Gander

## Exhibit A

for April 20, 2010 PB Mtg

### **Nonwater Urinal:** **Staff Recommended based on 7-21-10 PB approved languages**

#### **4715.0100 DEFINITIONS.**

Subp. 38. **Dead end.** "Dead end" means a branch leading from a soil, waste, vent pipe, building drain, ~~or~~ building sewer, or water distribution branch, and terminating at a developed length of two feet or more by means of a plug, cap, or other fitting.

Subp. XX. **Nonwater urinal.** "Nonwater urinal" means a plumbing fixture that is designed to receive and convey only liquid waste through a trap seal into the gravity drainage system without the use of water for such function.

#### **4715.0200 BASIC PLUMBING PRINCIPLES.**

S. Each fixture shall be provided with a separate, accessible, self-scouring, reliable ~~water-seal~~ trap placed as near to the fixture as possible.

#### **4715.0950 TRAP SEALS.**

Fixture traps shall have a ~~water~~ liquid seal depth of not less than two inches and not more than four inches, except where, under special conditions, a trap with a deeper seal may be found necessary by the administrative authority.

The horizontal length of the seal of any fixture trap shall not exceed six inches where the waste pipe required is two inches or less in diameter.

Traps shall be set true and level with respect to their ~~water~~ liquid seals and where necessary shall be protected from freezing.

#### **4715.1410 URINALS.**

Subp. 1. **Prohibited urinals.** Floor-type trough urinals are prohibited.

Subp. 2. **Nonwater Urinals.** Nonwater urinals shall comply with ASME A112.19.19-2006. Where a nonwater urinal is installed, a water supplied fixture shall be installed upstream of the nonwater urinal at the end of that same drainage branch. The water distribution system shall be designed to allow for nonwater urinal replacement with water supplied urinals without dead ends.

Each nonwater urinal shall be separately trapped by a liquid seal, which is protected from odor escape or evaporation of the trap contents by a non petroleum lighter than water. Metallic traps or traps with elastomeric membranes for nonwater urinals are prohibited.

Nonwater urinals which meet the requirements of this part are exempt from fixture trap requirements described in parts 4715.0900 and 4715.0960.

The owner of each nonwater urinal must ensure that the urinal is cleaned and maintained in strict compliance with the manufacturer's requirements.

*4/6/10*

## Exhibit B

State of Minnesota Plumbing Board  
Request For Action file #PB0037

(Revised – 3/23/10)

### 4715.11XX GREASE INTERCEPTORS.

**Subpart 1. Disclaimer.** For the purposes of this part, “UPC” means the 2009 edition of the Uniform Plumbing Code as promulgated by the International Association of Plumbing and Mechanical Officials (IAPMO), 5001 East Philadelphia Street, Ontario, California 91761. Portions of this part reproduce text and tables from the UPC (with permission of IAPMO). The UPC is not subject to frequent change and a copy of the UPC is available in the office of the commissioner of labor and industry. The UPC is copyright 2009 by the IAPMO. All rights reserved.

**Subp. 2. General Requirements.** A grease interceptor complying with the provisions of this part shall be installed in waste lines leading from fixtures or equipment in establishments where grease may effect line stoppage as determined by the administrative authority. Only waste requiring separation may discharge to a grease interceptor. Food waste grinders and dishwashers may discharge to a gravity grease interceptor where permitted by the manufacturer and the administrative authority.

Each establishment for which a grease interceptor is required shall have an interceptor which shall serve only that establishment unless otherwise approved by the administrative authority. Grease interceptors must be installed in approved locations and must be readily accessible for inspection and maintenance. Grease interceptors shall be located as close as practical to the fixtures served. Each grease interceptor installation must preclude siphoning and provide air relief. Each fixture discharging to a grease interceptor shall be trapped and vented in accordance with this code.

A grease interceptor located outside the building that is a part of an individual sewage disposal system design shall not be subject to the requirements of this chapter.

**Subp. 3. Hydromechanical Grease Interceptors.** Hydromechanical grease interceptors shall comply with ASME Standard A112.14.3. Plumbing fixtures or equipment connected to a hydromechanical grease interceptor shall discharge through an approved type of flow control installed in a readily accessible and visible location. The total flow through the flow control device shall not be greater than the rated flow of the grease interceptor. No external flow control device having adjustable or removable parts shall be installed. Except for integral flow control devices, each flow control vent shall connect to the plumbing vent system.

A vent shall be installed downstream of the grease interceptor in accordance with the requirements of this code.

Hydromechanical grease interceptors shall be sized using one of the following methods. When the flow rate of fixtures or appliances are unknown, the grease interceptor shall be sized using part A.

**A. Gravity flow rates.** The interceptor is sized based on the diameter of the drain discharging to the interceptor in accordance with the following table:

## Hydromechanical Interceptor Sizing Using Gravity Flow Rates

waste pipe diameter, in.	min. interceptor size, gpm
2	20
3	75
4	150
5	250
6	500

**B. Fixture capacity,** Where fixture dimensions and flow rates of all connected fixtures and equipment are known, the interceptor may be sized as follows:

- (1) Calculate the volume of each connected fixture.
- (2) Multiply the volume of all connected fixtures by a fill factor of 0.75 to obtain the discharge volume;
- (3) Divide the fixture discharge volume by a drain period of one minute.
- (4) Add flow rates of appliances, hydrants, and equipment.
- (5) The minimum grease interceptor size is the sum of all flow rates discharging to the interceptor.

### Example for Sizing Using Fixture Capacity

A two-compartment sink, a hose bibb, and an appliance will discharge to the interceptor.

**Step 1. Calculate the volume of each fixture.**

$$[\text{Length, in.}] \times [\text{Width, in.}] \times [\text{Depth, in.}] / 231 = [\text{Volume, gallons}]$$

$$24'' \times 24'' \times 12'' \times 2 \text{ compartments} / 231 = 59.8 \text{ gallons}$$

**Step 2. Calculate the discharge volume of each fixture.**

$$[\text{total volume}] \times 0.75 \text{ fill factor} = [\text{discharge volume}]$$

$$59.8 \text{ gallons} \times 0.75 = 44.9 \text{ gallons}$$

**Step 3. Calculate the flow rate from each fixture.**

$$[\text{discharge volume}] / [1\text{-minute drainage period}] = [\text{flow rate}]$$

$$44.9 \text{ gallons} / 1 \text{ minute} = 44.9 \text{ gpm}$$

**Step 4. Add flow rates from appliances, equipment, and hydrants.**

2-comp sink	44.9 gpm
hose bibb	5 gpm
appliance	2 gpm
	51.9 gpm

**Step 5. Minimum Interceptor size.**

The interceptor must be rated at 51.9 gpm or greater.

**Subp. 4. Gravity Grease Interceptors.** Gravity grease interceptors shall comply with IAPMO/ANSI Standard Z1001 or ASTM C1613. Gravity grease interceptors shall provide for free air circulation through the interceptor, and inlet and outlet pipes. Gravity grease interceptors shall be sized by the drainage fixture unit value for all connected fixtures in accordance with the following table.

Drainage fixture units (1, 2, 3)	Interceptor volume, gallons
8	500
21	750
35	1,000
90	1,250
172	1,500
216	2,000
307	2,500
342	3,000
428	4,000
576	5,000
720	7,500
2112	10,000
2640	15,000

**Notes**

- (1) The maximum allowable drainage fixture units plumbed to the kitchen drain lines that will be connected to the grease interceptor.
- (2) When the flow rate of directly connected fixture(s) or appliance(s) have no assigned drainage fixture unit values, the additional grease interceptor volume shall be based on the known flow rate (gpm) multiplied by 30 minutes.
- (3) Drainage fixture unit values must be determined from Minnesota Rules, part 4715.2300.

**Subp. 5. Protective Treatments.** Grease interceptors constructed of metal, concrete, or other materials subject to corrosion shall have protective treatment approved by the manufacturer.

**Subp. 6. Interceptors located outside of buildings.** A grease interceptor outside of the building must be installed to be protected from freezing. Buoyancy protection must be provided when required by the manufacturer's installation instructions. If installed in a non-paved area, the landscape must be bermed to divert runoff. Accessway(s) for exterior grease interceptors must be at least 20" square or diameter to allow adequate access to tank interior for inspection and maintenance. Access to the inlet and outlet must be provided. The grease interceptor and covers must be protected from loadings that may lead to structural collapse and must be designed to withstand any anticipated traffic loadings. Exterior grease interceptors to be abandoned shall be subject to the requirements of the Minnesota Pollution Control Agency for abandoning septic tanks.

**Subp. 7. Labeling.** All grease interceptors shall be provided with a clear and permanent product identification label listing the construction standard identified in subpart 3 or subpart 4 and any additional labeling requirements of that standard.

**Subp. 8. Testing, Maintenance & Records.** Each grease interceptor installation must pass a manometer test with one inch of water column for five minutes or a vacuum test with two inches of mercury for 60 minutes. Grease interceptors shall be inspected at least once every three months and shall be maintained in efficient operating condition by periodic removal of the accumulated grease and latent material. Records of inspection and maintenance must be kept. The administrative authority shall set the exact frequency, duration, and availability of the inspections, cleaning, and record-keeping information.

**4715.0100 DEFINITIONS.**

Subp. XX. **Gravity grease interceptor.** "Gravity grease interceptor" means a grease interceptor identified by volume, retention time, and gravity separation.

Subp. YY. **Hydromechanical grease interceptor.** "Hydromechanical grease interceptor" means a grease interceptor that incorporates air entrainment, hydromechanical separation, interior baffling, and/or barriers in combination or separately.