

Plumbing Board
Product and Code Review Committee
Meeting Minutes
August 27, 2008 – 9:30 a.m.
Department of Labor and Industry
443 Lafayette Road No., Saint Paul, MN 55155-4344
DLI.CCLDBOARDS@State.MN.US

Committee Members Present:

John A. Parizek
Lawrence Justin
Karl Abrahamson
Allen Lamm
Jim Peterson (Commissioner's Designee)

Staff Present:

Wendy Legge
Annette Trnka
Jim Peterson
Cathy Tran

Board Members Present:

Ron Thompson

Committee Members Absent:

None

Visitors:

Brian Noma
Doug Hall
Paul Granos
Bob Lechner
Scott Hughes
Fernando Nacionales
Benjamin Zuart

I. Call To Order

The meeting was called to order by Lawrence Justin at 9:41 a.m. and introductions were made.

II. Approval of Meeting Agenda

Lamm made a motion, seconded by Abrahamson to accept the Agenda. The vote was unanimous and the motion passed.

III. Approve Previous Minutes

Parizek made a motion, seconded by Abrahamson to accept the previous June 25, 2008 Minutes. The vote was unanimous and the motion passed.

IV. Special Business

A. RFA's Reviewed in past Committee Meetings – Updated information

Committee Approved 10-29-08

1. 4715.0640, 4715.1950 and 4715.2030; Water Closet Seat with Spray by Toto. (File PB00.31 – 05/07/08). Chris Paulsen attended by conference call. Representatives of Toto were present. Toto wants to get their product approved for use in maternity wards of hospitals and other care facilities. Mr. Paulsen states that their parent company is in Japan, and speaking with representatives of the parent company, they assert that this product is currently being widely used in hospitals in Japan. They haven't done a study on infections from users of this product. Paulsen also stated that there are physicians in New York that want to put this product in their medical practice. This would allow for long-term testing to see how the product does in a medical facility. The product is being considered under section 4715.0330, meaning Toto would need to get permission for use of this product from the administering authority, which in this case means the Department of Health. Ron Thompson states the concern of the Department of Health is whether this product meets the standard of the back flow prevention device, and the Plumbing Board would have to determine if this product meets those standards. Mr. Paulsen stated he would e-mail a water pipe diagram to the Plumbing Board members for review.

Tran states that because the product is specifically being used in a hospital in Waconia, MN, the administrative authority would be the City of Waconia. Paulsen states that Toto is working with the local Waconia inspector.

Tran states that in the past, this type of product has been approved for residential use only, never for public commercial settings. Tran stated that the Department of Labor and Industry's assessment is that this product's backflow prevention device does not meet the plumbing code. Paulsen asked if the Standards are lacking somehow regarding backflow prevention. Tran stated that some Standards specify a check valve as backflow prevention and no where in our Code do we allow a check valve as a backflow preventer. Tran also stated with this product, there is a solenoid valve downstream of the backflow preventer, therefore it does not meet the provision of the Plumbing Code. Paulsen clarified that the solenoid valve is upstream from the vacuum breaker. Paulsen stated that the six inch requirement above the water line is for pipe applied atmospheric vacuum breakers and the water flow passageways in this product are significantly smaller and this is an integral vacuum breaker.

Fernando spoke regarding the concerns from the MN Department of Health. He states that the issue of infection control is their biggest concern. One of the things that's required in hospitals and other health care facilities is that any space that cannot be effectively cleaned has to be sealed. He states there are several gaps in this fixture that cannot be cleaned, and it would almost be necessary to caulk every little space in the product. If the facility would be willing to do that, it would be acceptable. In this case, the City of

Waconia is the ultimate authority for patient use of this product. Fernando states it's a moot point to review it for state hospital rules, when it hasn't been determined that it meets the Minnesota plumbing code.

Tran states that under 4715.0330, it is an "alternative method" and would be reviewed by the administrative authority, and in which case this product would have to be determined on a case-by-case basis. This product is not prohibited by the Minnesota plumbing code. If Toto is asking for the product itself to be determined if it meets the plumbing code by the Board, that would not apply under 4715.0330. Parizek said that in one of the documents there are no control valves downstream of the backflow preventer and Paulsen had stated that on another model, there may be control valves downstream.

Parizek stated that if there is a pump downstream of the vacuum breaker, there's a chance of back pressure, which would be in violation of the plumbing code. Parizek also stated he's not sure how this product is vented. Parizek asked if there is a tube coming off of the backflow preventer going down towards the flood level rim of the fixture, to which Paulsen stated he believes there is a venting. Paulsen stated that in their technical manuals or service manuals for all of the washlet and Neorests there is a water flow diagram that shows how things are vented. Paulsen stated that he would send the Committee the information, along with photographs of the actual models. Justin stated that from his point of view as a designer, it appears that this issue could be solved by putting a pressure vacuum breaker on the supply line to it. Justin stated he doesn't want this Committee to be the stopping point where new products are concerned and asked the Committee members if they have enough information to provide to the full Board a recommendation with the information that will be provided, or if they feel they need further discussion at the Committee level. Peterson stated that he can't see anything that prohibits installing a backflow preventer and adding another one. Abrahamson stated he felt that there was enough information to move this forward to the Board. Justin asked if this moves to the Plumbing Board, they are asking for approval of the Neorest 550, and Mr. Paulsen confirmed.

After further discussion, Justin stated Toto needs to provide the following items for Committee or Board review: 1) a water pipe diagram of all models; 2) address the location of the vacuum breaker (whether the solenoid valve downstream or upstream?); 3) description of which of the seven items from the ANSI Standard the product meets and which it does not meet and why; and 4) the cleanliness of the retractable washer. Mr. Paulsen stated a full sample would be available for the Plumbing Board members to look at and review. Fernando asked if the product fails, does the hose sprayer retract. Paulsen stated that in the event that the power goes out, the nozzle will stay extended, but the water immediately ceases to flow. Lamm stated

that the additional back flow prevention device on the supply line is the only design problem to correct to meet the plumbing code and it was generally agreed by the Committee members. Lamm stated that the local authorities would have to deal with the health issues.

Tran asked Toto to specify what they are seeking approval for, statewide application, or just under section 4715.0330 as an alternative fixture, or something else? Mr. Paulsen said that on this issue, they are looking for approval on the Neorest, to which Justin stated that Mr. Paulsen should re-submit a packet with just the information on the product they're looking for approval for and for what application, commercial or private use, so there's no confusion. Mr. Paulsen stated they are seeking approval for products for special uses, not for commercial use, as far as restaurants, etc, but for settings such as health care. Justin stated that if they want state-wide approval, there are several items that would still need to be reviewed by this Committee before it would be forwarded to the Plumbing Board. Tran suggested they submit a revised Request For Action, specifying what Toto is looking for approval on. Toto had submitted a revised RFA to get acceptance under 4715.1420, which Peterson thought would be a good start. A concern is that the location of the ASSE 1001 device is not consistent with the listing standard for an ASSE 1001 device. Direction was for Toto to provide further information and to revise their RFA to acknowledge plumbing code change. The revised RFA will be sent to the Product and Code Review Committee for review.

The meeting took a break at 11:12. The meeting reconvened at 11:30.

- B. Preliminary review of outstanding Request For Action (RFA) items. Committee will review the RFA and determine where the RFA will be directed to for further evaluation.
 - 1. 4715.2110(Item I): Vista Clear Dental Units (File PB0012 – 01/30/07 & 07/22/08) – Jim Chandler of Vista Clear is presenting by conference call. He stated he had presented to the Plumbing Code Advisory Committee in April of 2007. He states that in dental clinics, the RPZ type devices can re-contaminate the treated water, making it an infection control problem. He states that in his product there are 8 levels of not only mechanical, but biochemical backflow prevention built into each device. 4715.2110 is the proposed language change. Justin asked if what they were asking is that a fourth footnote be added? Mr. Chandler answered yes. Peterson said that 4715.1730 would also need to be amended to modify the language to allow less than ½ inch pipe size. Lamm made a motion, seconded by Justin, to move this forward to the Plumbing Board, with the recommendation for approval. The RFA is to be revised to add footnote 4, under the 4715.2110 table. Peterson made a motion to make a friendly amendment to modify the language to allow less than ½ inch pipe size under 4715.1730, Subpart 1. Justin and Lamm accepted the friendly amendment. Staff will review the

language for submittal to the Plumbing Board, including a possible addition to adding new rule 4715.2164. Lamm and Justin also accepted this friendly amendment to the original motion.

Tran had the concern that the presenter has not provided evidence that the current system is a danger to immune compromised patients. Mr. Chandler stated that bio-films can develop inside water lines and are a potential risk for immune compromised patients, that's why they do what they do with the oxidation reduction and the filtration to remove the heterogeneous bacteria that coexists in city chlorinated city water, because they can grow into large colonies, generally non-pathogenic, but they do pose serious risks to immune compromised patients or those patients that have open tissue during the procedure. Parizek asked about the internal checks of the product as to what Standard they met, to which Mr. Chandler replied that the information had been sent to Peterson. Parizek asked how it could be proven that the check valve does what it's supposed to do and that the RPZ could not back flow from one device to another. Mr. Chandler stated that they do have the testing to show that backflow with their product does not happen. Lamm made a friendly amendment to bring this issue back to the Product and Code Review Committee, instead of the Plumbing Board, possibly in November, 2008. The vote was unanimous and the motion passed.

The meeting took a break at 1:05 p.m. and reconvened at 1:14 p.m.

2. 4715.2430, 4715.2440: Macerating Toilet Systems (File PB0035 – 07/22/08) Bob Lechner with Saniflo presenting. He states they install a sewage injection kit. Their product is approved with the International Plumbing Code and the Uniform Plumbing Code and in many states. The Standard for macerating systems is ANSI A112.3.4, 2000 edition. They are not looking to replace a gravity toilet system, but if there are circumstances where a gravity system is not possible that's where they would come in. Discussion took place on where this system could be included in the code and what sections would be affected. Their product has been used in Canada for 23 years. This system includes the sink, shower, tub and toilet. Abrahamson asked the presenter if this system has ever been tested to a manometer test. The presenter said he will e-mail that information to the members. Thompson asked where this product is prohibited. Justin stated it's located in section 4715.2440. Parizek stated that a vent would have to be looked at, but Justin stated that could be addressed if a new section was added for the product. Parizek stated that it couldn't be used in a septic system. Mr. Lechner stated that there was a study done on the effects of a macerating system on a sump system, which he will also e-mail. Tran stated that the trap prevention issue would also need to be addressed. Tran asked if the suds and hair from the shower caused a problem to the system and was told by Mr. Lechner that there have never been any issues. Justin stated the Committee will be looking to DLI staff on drafting new code language.

Tran stated that 4715.0920 would also need to be addressed. There was no motion made, however, the Presenter was directed to work with DLI staff to draft language to bring back to the Committee.

V. Open Forum

There were no requests for Open Forum.

VI. Discussion

A. New Request For Action items.

DLI to provide updated list of RFA's for Committee to schedule review date.

VII. Announcements

A. Next Regularly Scheduled Meeting:

i. October 29, 2008 – 9:30 a.m. – Minnesota Room, DLI

XI. Adjournment

A motion was made by Parizek, seconded by to adjourn the meeting. The vote was unanimous and the motion passed. The meeting adjourned at 2:00 p.m.

Respectfully Submitted,

Lawrence Justin

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