

# Plumbing Board Request for Action

PRINT IN INK or TYPE

<b>NAME OF SUBMITTER</b> Joel S. Hoistad/NW Chapter of Building Officials	<b>PURPOSE OF REQUEST</b> (check all that apply): <input type="checkbox"/> New Code <input type="checkbox"/> Code Amendment <input checked="" type="checkbox"/> Repeal of an existing Rule
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The Minnesota Plumbing Code (MN Rules, Chapter 4714) is available at [www.dli.mn.gov/CCLD/PlumbingCode.asp](http://www.dli.mn.gov/CCLD/PlumbingCode.asp)

**Specify the purpose of the proposal:** If recommendation for code change for appurtenance or method (check all that apply)

Appurtenance (e.g., water conditioning equipment)       Test Method  
 Other (describe)      Redunancy - Dishwasher listed air gap device

**Does your submission contain a Trade Secret?**  Yes  No

If Yes, mark **"TRADE SECRET"** prominently on each page of your submission that you believe contains trade secret information. Minnesota Statutes, section 13.37, subdivision 1(b), defines "trade secret" as follows:

"Trade secret information" means government data, including a formula, pattern, compilation, program, device, method, technique or process (1) that was supplied by the affected individual or organization, (2) that is the subject of efforts by the individual or organization that are reasonable under the circumstances to maintain its secrecy, and (3) that derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.

Note that, although "trade secret" information is generally not public, the Board and its committees may disclose "trade secret" information at a public meeting of the Board or committee if reasonably necessary for the Board or committee to conduct the business or agenda item before it (such as your request.) The record of the meeting will be public.

**Describe the proposed change.** The Minnesota Plumbing Code (Minnesota Rules Chapter 4714) is available via the World Wide Web at <http://www.revisor.leg.state.mn.us/arule/4714/>

**NOTE:**

- Please review the Minnesota Plumbing Code and include all parts of the Code that require revision to accomplish your purpose.
- The proposed change, including suggested rule language, should be *specific*. If modifying existing rule language, underline new words and ~~strike through deleted words~~. Please list all areas of the Minnesota Plumbing Code that would be affected.

4714.0414.3 Drainage Connection - Domestic dishwashing machines shall discharge indirectly ~~through an air gap fitting in accordance with section 807.4~~ into a waste receptor, awye branch fitting or the tail piece of a kitchen sink, or dishwasher connection of a food waste grinder. Commercial dishwashing machines shall discharge indirectly through an air gap or direct connection in accordance with section 704.3 with floor drain protection.

~~4714.0807.4 Domestic Dishwashing Machine - No domestic dishwashing machine shall be directly connected to a drainage system or food waste disposer without the use of an approved dishwasher air gap fitting on the discharge side of the dishwashing machine. Listed air gaps shall be installed with the flood-level (FL) marking at or above the flood level of the sink or drainboard, whichever is higher.~~

<b>Office Use Only</b>			
RFA File No. PB0099	Date Received by DLI	Dated Received by Committee	Date of Forwarded to Board
Title of RFA	By:		
Committee Recommendation to the Board: <input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> Abstain			
Board approved as submitted: <input type="checkbox"/> Yes <input type="checkbox"/> No		Board approved as modified: <input type="checkbox"/> Yes <input type="checkbox"/> No	
This material can be made available in different forms, such as large print, Braille or on a tape. To request, call 1-800-342-5354 (DIAL-DLI).			

**Need and Reasons For the Change.** Thoroughly explain the need and why you believe it is reasonable to make this change. During a rulemaking process, the need and reasonableness of all proposed rule changes must be justified; therefore, a detailed explanation is necessary to ensure the Board thoroughly considers all aspects of the proposal.

The need for this change is that the device in question has added cost to projects unnecessarily, has caused water damage when these devices fail, and were never justified with a need for them in the first place. We couldn't find record of even one instance where a backup in a kitchen sink was under enough pressure to force waste water back into a dishwasher causing illness. It would be reasonable to eliminate this code requirement, as we have qualified (MN Licensed) plumbers installing the majority of these dishwashers and they are being installed properly, virtually eliminating any possible back up of the sewer into dishwashing machines. Also, in the 2015 & 2018 National Standard Plumbing Code (which I have attached to this email), it is giving the consumer and the installer an option of the high loop under the countertop OR be connected to a deck-mounted dishwasher air gap fitting.

If your product/method standard(s) is not currently listed in both national codes, your Request For Action will not be considered by the Board or its committees, however, you are welcome to present at any Board meeting during the Open Forum section of the Agenda.

The proposal must be accompanied by copies of any published standards, the results of testing, and copies of any product listings, as documentation of the health, sanitation and safety performance of any materials, methods, fixtures, and/or appurtenances. If none are available, please explain:

See attached documents from the 2015 & 2018 National Standard Plumbing Code.

Please attach electronic scanned copies of any literature, standards and product approvals or listings. Printed or copyrighted materials, ***along with written permission from the publisher to distribute the materials at meetings***, should be sent to the Plumbing Board, c/o Department of Labor and Industry, 443 Lafayette Road No., St. Paul, MN 55155-4344.

**Primary reason for change:** (check only one)

- |   |   |
|---|---|
| <input type="checkbox"/> Protect public, health, safety, welfare, or security | <input type="checkbox"/> Mandated by legislature                  |
| <input checked="" type="checkbox"/> Lower construction costs                  | <input type="checkbox"/> Provide uniform application              |
| <input type="checkbox"/> Encourage new methods and materials                  | <input type="checkbox"/> Clarify provisions                       |
| <input type="checkbox"/> Change made at national level                        | <input checked="" type="checkbox"/> Situation unique to Minnesota |
| <input type="checkbox"/> Other (describe) _____                               |   |

**Anticipated benefits:** (check all that apply)

- |  |  |
|--|--|
| <input type="checkbox"/> Save lives/reduce injuries                        | <input checked="" type="checkbox"/> Provide more affordable construction |
| <input checked="" type="checkbox"/> Improve uniform application            | <input type="checkbox"/> Provide building property                       |
| <input type="checkbox"/> Improve health of indoor environment              | <input type="checkbox"/> Drinking water quality protection               |
| <input checked="" type="checkbox"/> Provide more construction alternatives | <input checked="" type="checkbox"/> Decrease cost of enforcement         |
| <input checked="" type="checkbox"/> Reduce regulation                      | <input type="checkbox"/> Other (describe) _____                          |

**Economic impact:** (explain all answers marked "yes")

1. Does the proposed change increase or decrease the cost of enforcement?  Yes  No If yes, explain

2. Does the proposed change increase or decrease the cost of compliance?  Yes  No If yes, explain  
Include the estimated cost increase or decrease, and who will bear the cost increase or experience the cost decrease:  
The proposed change would decrease the cost of compliance - less holes to cut into very costly countertops/sinks. The savings will start at the plumber doing the work and will be passed along to the end consumer.

3. Are there less costly or intrusive methods to achieve the proposed change?  Yes  No If yes, explain  
The less costly or intrusive would be to eliminate the requirement for this air gap device as it is redundant.

4. Were alternative methods considered?  Yes  No If no, why not? If yes, explain what alternative methods were considered and why they were rejected.

There were never any alternate ways indicated by code to achieve the end result, and none that industry could come up with.

5. If there is a fiscal impact, try to explain any benefit that will offset the cost of the change. If there is no impact, mark "N/A." N/A

6. Provide a description of the classes of persons affected by a proposed change, who will bear the cost, and who will benefit. There will be no cost - some savings of dollars to end consumers who will also be the beneficiaries of this code change.

7. Does the proposed rule affect farming operations? (Agricultural buildings are exempt from the Minnesota Building Code under Minnesota Statutes, Section 326B.121.)  Yes  No If yes, explain

Are there any existing Federal Standards?  Yes  No If yes, list:

2015 & 2018 National Standard Plumbing Code

Are there any differences between the proposed change and existing federal regulations?  Yes  No  
 Not applicable  Unknown If yes, describe each difference & explain why each difference is needed & reasonable.  
The National Standard gives the consumer and the installer an option of a high loop under the countertop or a deck mounted air gap, where the Minnesota Plumbing Code does not give an option.

Minnesota Statutes, section 14.127, requires the Board to determine if the cost of complying with proposed rule changes in the first year after the changes take effect will exceed \$25,000 for any small business or small city. A small business is defined as a business (either for profit or nonprofit) with less than 50 full-time employees and a small city is defined as a city with less than ten full-time employees.

During the first year after the proposed changes go into effect, will it cost more than \$25,000 for any small business or small city of comply with the change?  Yes  No If yes, identify by name the small business(es) or small city(ies).

Will this proposed plumbing code amendment require any local government to adopt or amend an ordinance or other regulation in order to comply with the proposed plumbing code amendment?  Yes  No, If yes, identify by name the government(s) and ordinances(s) that will need to be amended in order to comply with the proposed plumbing code amendment.

Additional supporting documentation may also be attached to this form. Are there any additional comments you feel the Committee/Board may need to consider? If so, please state them here:

Please consider the letter written by a local plumber as testimony and the 2015 & 2018 National Standard Plumbing Code.

**Information regarding submitting this form:**

- Submissions are received and heard by the Committee on an "as received" basis. **Any missing documentation will delay the process, and your proposal will be listed as the date it was received "Complete."**
- **Submit any supporting documentation to be considered**, such as manufacturer's literature, approvals by other states, and engineering data electronically to [DLI.CCLDBOARDS@state.mn.us](mailto:DLI.CCLDBOARDS@state.mn.us). Once your Request For Action form has been received, it will be assigned a file number. Please reference this file number on any correspondence and supplemental submissions.
- **For copyrighted materials that must be purchased from publishers, such as published standards, product approvals or testing data, listings by agencies (IAPMO, ASSE, ASTM, etc.,) you may send just 2 copies, along with written permission from the publisher to distribute the materials at meetings, via U.S. Mail to: Plumbing Board, c/o Department of Labor and Industry, 443 Lafayette Road No., St. Paul, MN 55155-4344.**
- **For materials that must be submitted by U.S. Mail, please include a copy of your "Request For Action" form originally submitted and reference your assigned RFA file number.**

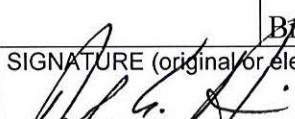
**Information for presentation to the Committee and/or Board:**

- Limit presentations to 5 minutes or less.
- Be prepared to answer questions regarding the proposal and any documentation.

**Information regarding Committee and/or Board function:**

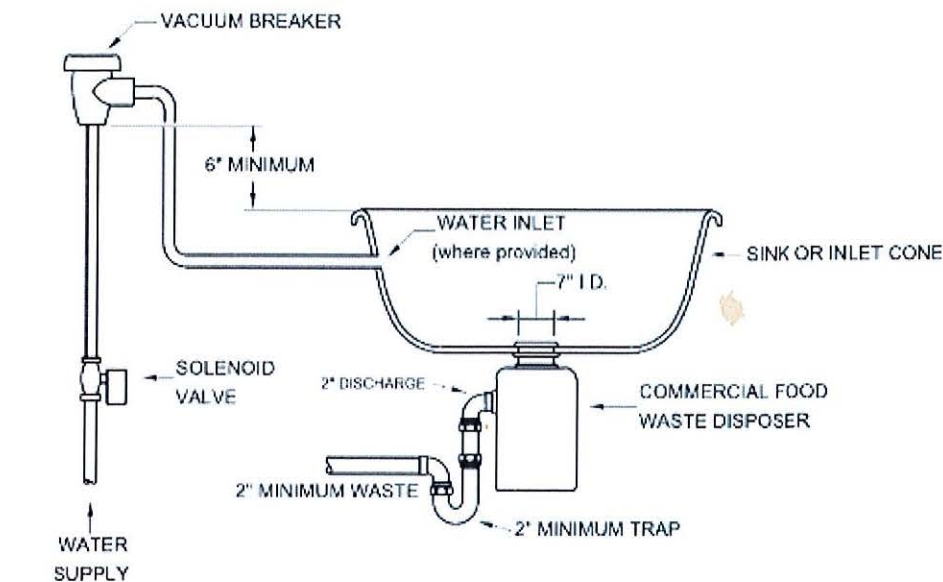
- The Plumbing Board or designated Committee.

I understand that any action is a recommendation to the Plumbing Board and is not to be considered final action.

NAME AND E-MAIL ADDRESS		FIRM NAME	
Joel S. Hoistad - jhoistad@breckenridgemn.net		NW Chapter of Building Officials	
NAME, PHONE NUMBER AND E-MAIL ADDRESS OF PRESENTER TO THE COMMITTEE (if different):			
SAME AS ABOVE			
ADDRESS		CITY	STAT ZIP CODE
420 Nebraska Ave		Breckenridge	MN 56520
PHONE	SIGNATURE (original or electronic)	DATE	
(218)-643-1431 ext. 106		6-19-18	

For Assistance or questions on completing this form, contact Cathy Tran, Department of Labor and Industry at 651-284-5898.

<b>For Office/Committee Use Only</b>			
Proposal received completed? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Date Proposer notified of gaps:	Mode of notification (e.g., e-mail)	Date returned to Proposer:	Date materials re-received:



**NOTES:**

1. The water supply to a commercial food waste disposer must be protected against back-siphonage by a vacuum breaker.

Figure 7.14.3

**A COMMERCIAL FOOD WASTE DISPOSER INSTALLATION**

**7.14.4 Water Supply**

An adequate supply of water shall be provided for proper operation of food waste disposers.

**7.15 DISHWASHING MACHINES**

**7.15.1 Compliance**

a. Domestic dishwashing machines shall comply with UL 749 and AHAM DW-1. The water supply to domestic dishwashing machines shall be protected from back siphonage by an integral air gap, an other internal means, or a vacuum breaker. Air gap fittings for drain discharge shall comply with ASSE 1021.

b. Commercial dishwashing machines shall comply with UL 921 and NSF 3. Backflow prevention shall comply with ASSE 1004.

**7.15.2 Residential Sink and Dishwasher**

The discharge from a residential kitchen sink and dishwasher may discharge through a single 1-1/2" trap. The discharge line from the dishwasher shall be not less than the size recommended by the dishwasher manufacturer. It shall either be looped up and securely fastened to the underside of the counter or be connected to a deck-mounted dishwasher air gap fitting. The discharge shall then be connected to a branch inlet wye fitting between the sink waste outlet and the trap inlet. The discharge may also drain indirectly into a trapped standpipe, or receptor. See Figure 7.15.2

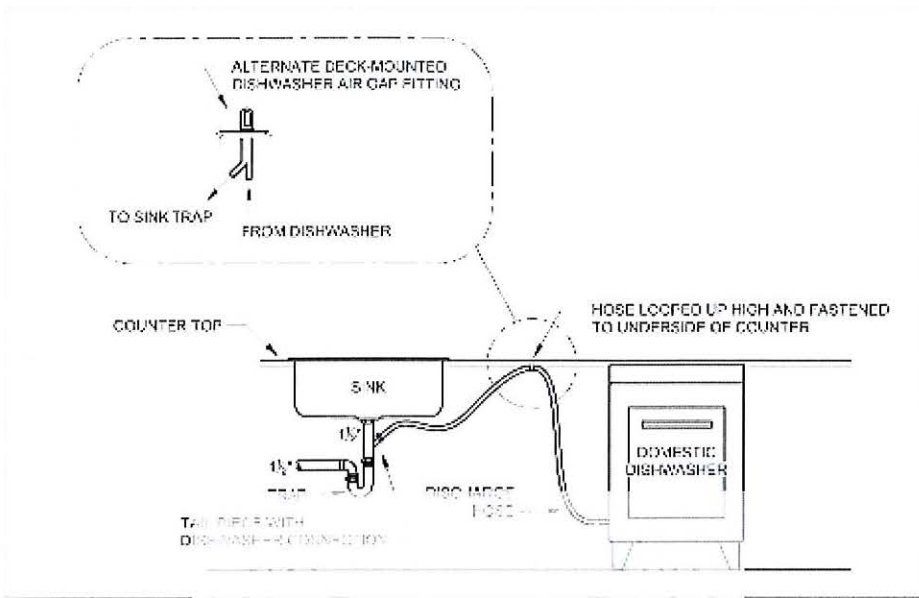
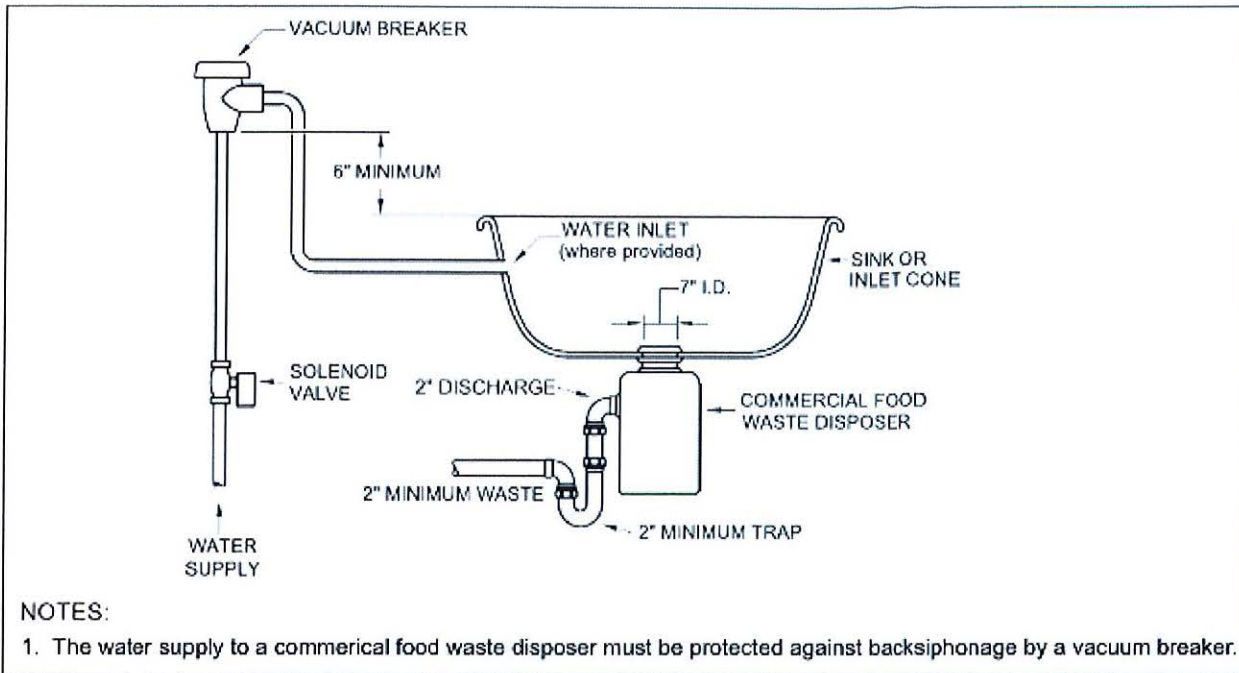


Figure 7.15.2  
A RESIDENTIAL KITCHEN SINK AND DISHWASHER

### 7.15.3 Residential Sink, Dishwasher, and Food Waste Disposer

The discharge from a residential kitchen sink, dishwasher, and food waste disposer may discharge through a single 1-1/2" trap. The discharge line from the dishwasher shall be not less than the size recommended by the dishwasher manufacturer. It shall either be looped up and securely fastened to the underside of the counter or be connected to a deck-mounted dishwasher air gap fitting. The discharge shall then be connected either to the chamber of the food waste disposer or to a branch inlet wye fitting between the food waste disposer outlet and the trap inlet. The discharge may also drain indirectly into a trapped standpipe or receptor.

See Figure 7.15.3



**Figure 7.14.3**  
**A COMMERCIAL FOOD WASTE DISPOSER INSTALLATION**

b. Commercial electric clothes washers shall comply with UL 1206 and include backflow prevention.

**Comment:** Automatic clothes washers that comply with the referenced appliance standards include an internal air gap in the water fill line and do not require the installation of an external backflow prevention device.

**7.14 FOOD WASTE DISPOSERS**

**7.14.1 Compliance**

Domestic food waste disposer units shall comply with UL 430 and either AHAM FWD-1 or ASSE 1008.

**7.14.2 Domestic Units**

Domestic food waste disposer units shall have not less than a 1-1/2" nominal waste connection to the drainage system. Such units may connect to a kitchen sink drain outlet, as permitted in Section 7.11.2.a.

**7.14.3 Commercial Units**

Commercial food waste disposer units shall be connected to the drainage system and be separately trapped from any sink compartment or other fixture. The waste pipe size for such fixtures shall be of sufficient size to serve the fixture but shall be not less than 2-inch nominal size. *See Figure 7.14.3*

**7.14.4 Water Supply**

An adequate supply of water shall be provided for proper operation of food waste disposers.

**7.15 DISHWASHING MACHINES**

**7.15.1 Compliance**

a. Domestic dishwashing machines shall comply with UL 749 and AHAM DW-1. The water supply to domestic dishwashing machines shall be protected from backsiphonage by an integral air gap, another internal means, or a vacuum breaker. Air gap fittings for drain discharge shall comply with ASSE 1021.

b. Commercial dishwashing machines shall comply with UL 921 and NSF 3. Backflow prevention shall comply with ASSE 1004.

**7.15.2 Residential Sink and Dishwasher**

The discharge from a residential kitchen sink and dishwasher may discharge through a single 1-1/2" trap. The discharge line from the dishwasher shall be not less than the size recommended by the dishwasher manufacturer. **It shall either be looped up and securely fastened to the underside of the counter or be connected to a deck-mounted dishwasher air gap fitting.** The discharge shall then be connected to a branch inlet wye fitting between the sink waste outlet and the trap inlet. The discharge may also drain indirectly into a trapped standpipe, or receptor. *See Figure 7.15.2*

**7.15.3 Residential Sink, Dishwasher, and Food Waste Disposer**

The discharge from a residential kitchen sink, dishwasher, and food waste disposer may discharge through a single 1-1/2" trap. The discharge line from the dishwasher shall be not less than the size recommended by the dishwasher manufacturer. **It shall either be looped up and securely fastened to the underside of the counter or be connected to a deck-mounted dish-**

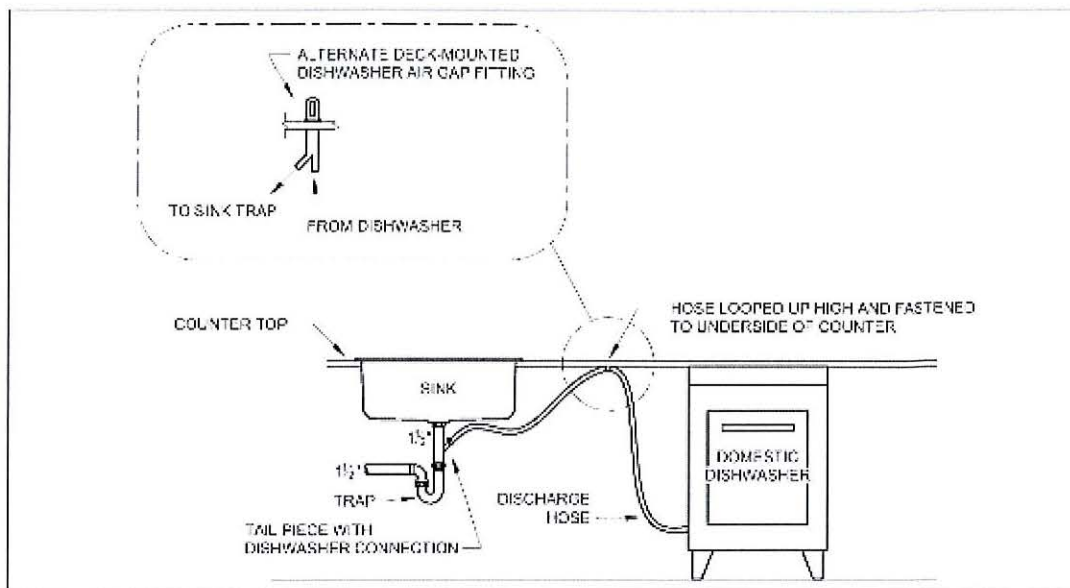


Figure 7.15.2

### A RESIDENTIAL KITCHEN SINK AND DISHWASHER

washer air gap fitting. The discharge shall then be connected either to the chamber of the food waste disposer or to a branch inlet wye fitting between the food waste disposer outlet and the trap inlet. The discharge may also drain indirectly into a trapped standpipe or receptor. See Figure 7.15.3

#### 7.15.4 Commercial Dishwashing Machine

a. Commercial dishwashing machines shall be indirectly connected to the drainage system through either an air gap or an air break. When the machine is within 5 feet developed length of a trapped and vented floor drain, an indirect waste pipe from the dishwasher may be connected to the inlet side of the floor drain trap. See Figure 7.15.4

b. Commercial dishwashers shall be permitted to discharge through a grease interceptor in accordance with Section 6.2.6.a.

### 7.16 FLOOR DRAINS, AREA DRAINS, AND TRENCH DRAINS

#### 7.16.1 Compliance

Floor drains, area drains, and trench drains shall comply with ASME A112.6.3 or, if stainless steel, ASME A112.3.1.

#### 7.16.2 Grate Free Area and Strainer or Sediment Bucket

a. The free area of the top grate or strainer grate for floor drains, area drains, and trench drains shall comply with ASME A112.6.3 based on their outlet connection size. Where floor drains and area drains receive other than clear water waste, they shall include an internal secondary outlet strainer or re-

movable metal sediment bucket to retain solids.

b. The trap seal for floor drains shall be not less than 2 inches deep.

c. Where infrequently used floor drains are subject to evaporation of their trap seals, they shall either 1) be provided with a 4-inch deep trap seal and have an accessible means to replenish, or 2) be fed from an automatic trap seal priming device complying with ASSE 1018 or ASSE 1044, or 3) be fitted with a barrier type floor drain trap seal protection device complying with ASSE 1072.

d. Where traps are automatically primed, the priming connection shall be above the weir of the trap.

See Figures 7.16.2-A through -C

#### 7.16.3 Size of Floor Drains

Floor drains shall be not less than 2" pipe size and be sized on the drain pipe size required for the floor drain application.

#### 7.16.4 Required Locations for Floor Drains

a. Floor drains shall be provided in the following areas:

1. Toilet rooms containing either one water closet and one wall hung urinal, two or more water closets, or two or more wall hung urinals, except in a dwelling unit.
2. Commercial kitchens.
3. Common Laundry Rooms

#### 7.16.5 Walk-in Coolers and Freezers

Floor drains located in walk-in coolers and walk-in freezers where food or other products for human consumption are





6-5-18

City of Breckenridge

Joel Hoistad Building Official

Good Morning Joel

I just want to take a minute of your time to discuss dishwasher air gaps that are now being enforced. I've had many sometimes heated discussions with home owners as far as why we had to drill a hole and install an above counter air gap in there beautiful and expensive counter top. Also there has been issues with some people as far as the noise emitting from the air gap. Being in the plumbing service business, we have seen many instances of the customer disconnecting them when they have gone bad and leaked on the counter. I just wanted to touch base with you to see if there are others that are experiencing the same issues, it seem to be a shame to have to have something like that protruding through the counter top. I've been a plumber for over 40 years and I understand that we are protecting the health of our customers but I have not had an issue with mounting them to the bottom of the counter top. The UPC allows this in many states. I have talked to many plumbers who are feeling the same as I and am wondering if this issue could possibly be brought to the table for some consideration. We would appreciate any help you could give us on this issue. Thank you for your time.

Sincerely

Tim Schmidt

Mn PM059367

ND 8901