AMENDMENT PROPOSAL

Please provide all of the following items in your amendment proposal:

**Code Sections/Tables/ Figures Proposed for Revision:**
IPC 501.2

**Note:** If the proposal is for a new section, indicate (new).

**Proposal:**

Add new text as follows:

When the heating system is inactive, one of the following methods of preventing stagnation of the water shall be employed:
1. The heating coil circulation pump shall be cycled on with valves open every 12 hours for a minimum of 5 minutes.
2. Other methods approved by the building official.

**Note:** Show the proposal using **strikeout**, underline format. At the beginning of each section, one of the following instruction lines are also needed:
- Revise as follows
- Add new text as follows
- Delete and substitute as follows
- Delete without substitution

**Supporting Information:**

**Purpose:**
To prevent the stagnation of water in heating coils when heating is not being used, thereby reducing the risk of legionella and other biological based hazards.

**Reasons:**
The code does not provide specific requirements to maintain the potability of water potentially leading to the growth of Legionella and other contaminants. Periodically cycling the coil pump with open valves flushes the coil with water containing some residual chlorine which may help reduce bacterial growth. According to HAACP-Based Programs for Preventing Disease and Injury from Premise Plumbing: A Building Consensus published in Pathogens Vol 4 pp513-528, With respect to premises plumbing systems "Flow is often sporadic; water can stagnate and become tepid with levels of residual disinfectant dropping off quickly to dangerously low levels. Nutrients required by
microorganisms are available from plumbing materials, sediment and additives, such as phosphate corrosion inhibitors. Taken together, these conditions facilitate incubation of microorganisms and extensive, sometimes-rapid colonization of surfaces.” Flushing the heating coils every 12 hours was selected as a reasonable interval.

**Note:** The following items are required to be included:

**Purpose:** The proponent shall clearly state the purpose of the proposed amendment to physical, environmental and customary characteristics that are specific to the City and County of Denver (e.g., clarify the Code; revise outdated material; substitute new or revised material for physical, environmental and customary characteristics; add new requirements to the Code; delete current requirements, etc.)

**Reasons:** The proponent shall justify changing the current Code provisions, stating why the proposal is necessary to reflect physical, environmental and customary characteristics that are specific to the City and County of Denver. Proposals that add or delete requirements shall be supported by a logical explanation which clearly shows why the current does not reflect physical, environmental and customary characteristics that are specific to the City and County of Denver and explains how such proposals will improve the Code.

**Substantiation:** The proponent shall substantiate the proposed amendment based on technical information and substantiation. Substantiation provided which is reviewed and determined as not germane to the technical issues addressed in the proposed amendment shall be identified as such.

**Bibliography** (as needed): The proponent shall submit a bibliography when substantiating material is associated with the amendment proposal. The proponent shall make the substantiating materials available for review.

**Referenced Standards:**

List any new referenced standards that are proposed to be referenced in the code.

**Impact:**

The effect of the amendment proposal on the cost of construction: Increase.

**Note:** The proponent shall indicate one of the following regarding the impact of the amendment proposal:

- The effect of the amendment proposal on the cost of construction; Increase, Reduce, No Effect:
- The effect of the amendment proposal on the cost of design; Increase, Reduce, No Effect:
- Is the amendment proposal more- or less-restrictive than the I-Codes; More, Less, Same:

**Departmental Impact:**

The effect of the amendment proposal on the cost of review: Increase.

**Note:** Indicate one of the following regarding the impact of the amendment proposal:

- The effect of the amendment proposal on the cost of review; Increase, Reduce, No Effect:
- The effect of the amendment proposal on the cost of enforcement/inspection; Increase, Reduce, No Effect:

November 15, 2005