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PUBLIC PROPOSAL FORM

FOR PUBLIC PROPOSALS ON THE INTERNATIONAL CODES
2004/2005 CODE DEVELOPMENT CYCLE

PLEASE SEE REVERSE FOR INSTRUCTIONS ON SUBMITTING PUBLIC PROPOSALS. PROPOSALS MUST COMPLY WITH THESE INSTRUCTIONS.

CLOSING DATE: All Proposals Must Be Received by August 20, 2004.

The 2004/2005 Code Development Hearings are tentatively scheduled for February 21 – March 2, 2005 in Cincinnati, OH.

- 1) Indicate the format in which you would like to receive your Public Proposals Monograph (PPM), Report of the Hearing (ROH) and Final Action Agenda (FAA):

Paper * CD *Download from ICC Website

(*Note: A paper copy will not be sent to you if you have chosen the CD or Download format.)

- 2) PLEASE TYPE OR PRINT CLEARLY: FORMS WILL BE RETURNED if they contain unreadable information.

Name:	Guy Tomberlin, Chairman				Date:	8/19/2004
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- 3) *Signature: _____ Signature on File (see over)

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- 4) Cost Impact: Indicate if this Proposal: will will not increase the cost of construction.

- 5) Indicate appropriate International Code(s) associated with this Public Proposal – Please use Acronym:

If you have also submitted a separate coordination change to another I-Code, please indicate the code: _____
(See back of this form for list of names and acronyms for the International Codes).

- 6) Revision to: Section 2209.3.2.6.2 Table _____ Figure _____

- 7) PROPOSAL Please check appropriate box:

Revise as follows: Add new text as follows Delete and substitute as follows: Delete without Substitution(s):

Show the proposed NEW, REVISED or DELETED TEXT in legislative format: Line through text to be deleted. <u>Underline text to be added.</u>
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PROPOSAL: Revise Section 2209.3.2.6.2 to read as follows:

2209.3.2.6 Canopy-tops. Gaseous hydrogen compression and storage equipment located on top of motor fuel dispensing facility canopies shall be in accordance with Sections 2209.3.2.6.1 through 2209.3.2.6.3 2209.3.6.4, Chapters 30 and 35 and the *International Fuel Gas Code*.

2209.3.2.6.1 Construction. Canopies shall be constructed in accordance with the motor fuel dispensing facility canopy requirements of Section 406.5 of the *International Building Code*.

2209.3.2.6.2 Fire extinguishing system. Fuel dispensing areas under canopies shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The design of the sprinkler system shall not be less than that required for Extra Hazard Group 2 Occupancies. Operation of the sprinkler system shall activate the emergency functions of the ~~Section 2209.3.2.6.2.1~~

and ~~2209.3.2.6.2.2~~ shutdown control required in Section 2209.5.3.

~~2209.3.2.6.2.1~~ **2209.3.2.6.3 Emergency discharge.** An emergency discharge system shall be provided which will discharge the hydrogen gas from the equipment on the canopy-top through the vent pipe system. An approved dual-action switch shall be provided to activate the emergency discharge system. The emergency discharge switch shall be installed at an approved accessible location within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from, the fuel dispensers. A sign shall be provided at the switch reading: FIRE DEPARTMENT USE ONLY – EMERGENCY HYDROGEN RELEASE.

~~2209.3.2.6.2.2~~ **Emergency shutdown control.** Operation of the fire sprinkler system shall activate the emergency shutdown control required by Section 2209.5.3.

~~2209.3.2.6.3~~ **2209.3.2.6.4 Signage.** Approved signage having 2-inch (51 mm) block letters shall be affixed at a conspicuous location on the exterior of the canopy structure stating: CANOPY TOP HYDROGEN STORAGE.

8) **SUPPORTING INFORMATION (State purpose and reason, and provide substantiation to support proposed change):**

This proposal would revise the requirement for a discharge of the hydrogen system from an automatic release to a manual release. Comments and questions voiced at the ICC hearing at which this change was adopted, caused the Ad Hoc Hydrogen Committee to re-assess this particular issue.

A manual release of the hydrogen was determined to provide a higher level of safety and control of the incident rather than automatically discharging the hydrogen when the sprinkler system is activated. The manual release would allow emergency responders to make an on-scene decision of whether or not the release of hydrogen is appropriate or prudent.

To automatically discharge the hydrogen gas upon the sprinkler system water flow signal, could potentially result in an unnecessary release of hydrogen. There could be numerous instances where the fire is controlled beneath the canopy and the automatic release of hydrogen would not warranted or even wanted. In these situations where a small fire is controlled under the canopy, the automatic release of hydrogen could create a larger hazard. The manual release will provide the ability for the on-scene emergency personnel to make a decision based on the specific incident at the facility. This decision could be affected by the intensity of the fire, weather conditions, other exposures, etc.

Tying the discharge of the hydrogen to actuation of the sprinkler system, could also introduce the possibility of a single common point of failure. Specifically, if the sprinkler system fails to actuate for an actual fire, it may not trigger the discharge of hydrogen, with no means of manually bypassing this action.

Providing a manual means of discharge would allow the fire department to assess the need to discharge the hydrogen and to do so only when necessary. Requiring a 'double-action' actuation device will further preclude accidental release of hydrogen.