

**AIHA Laboratory Health and Safety Committee
Selected ICC Code Change Proposals of Interest – May2005 update**

Below is a summary of selected code change proposals which were discussed at the International Code Council Public Hearing from February 22- March 4 in Cincinnati Ohio. Code change proposals included below are selected for your information due to their industrial hygiene or fire protection content, with some bias on my part to issues related to laboratory environments. If interested, you can review the complete set of code change proposals at <http://www.iccsafe.org/cs/codes/2004-05cycle/ProposedChanges/index.html>

At this public hearing, the individual code committees listened to each proposal, heard any supporting or opposing testimony from persons in attendance and then either approved, disapproved, or approved with modification each proposal. Proponents also had the option of bringing their item to a vote by code officials in attendance if not satisfied with code committee rulings. This was not done often, but when done, was occasionally successful in overturning a committee ruling.

Following the public hearing the findings were posted on the ICC website. Comments from any party may be submitted in support or oppose the rulings by the code committees (or the floor vote) to offer alternative language for consideration. **THESE COMMENTS ARE DUE BY June 16, 2005. The link listed above contains both the resulting vote on each item and (scroll down the page) the proposals, their rationale, and the rational for committee action taken. Also not the Code Development box on this page which contains a public proposal comment form and instructions for completing.** Those items for which comments have been supplied will then be reviewed at the Final Action Hearing in October 2005, where a similar process as to the public hearing is followed, with the difference that each item is voted on by the code officials in attendance. The results of the Final Action Hearing will become part of the 2006 International Codes.

Please also note that the summaries below are only from the International Fire Code and the International Mechanical Code. You may find items of interest in the other code change proposals (building code, plumbing code, etc). At the end of each proposal see either A or AS – approved as submitted, AM – approved as modified, D – disapproved.

Please contact Ken Kretchman (919-515-6860) if you have any questions.

International Fire Code

- F14-04/05 - Proposes that “any amount” of pyrophoric gas require a permit - AM
- F26-04/05 - Regards battery charging off gassing. Adds “and similar equipment including, but not limited to, floor scrubbers and floor buffers” to forklift battery charging application (Section 309.1) - A
- F27-04/05 - Adds “or hydrogen” to requirement for powered industrial trucks using liquid fuel, or LP gas, to be fueled outside. (Recognizes increased applications for fuel cells) - AS
- F33-04/05
- F34-04/05
- F35-04/05 - Adds additional conditions to the requirement for an approved fire safety and evacuation plan. (Section 404.2) - D
- F36-04/05 - Adds “at least annually” to text requiring emergency evacuation drills. (Section 405.1). A
- F44-04/05 - Adds “and the fire chief” to text requiring key box with keys to allow access to the fire code official to areas where access is restricted because of secured openings or where immediate life safety / fire safety access is needed. (Section 506.1) - W
- F56-04/05 D
- F57-04/05 A
- F58-04/05 - Modifies text regarding use of detection systems for refrigerant gases. (Section 606.8) D
- F59-04/05 - Proposes omission of emergency shutoff for electrically energized equipment where refrigerants are nonflammable. (Section 606.9.1) AM
- F60-04/05 - Proposes option of “engineered scrubbing system” for ammonia refrigeration systems in lieu of other scrubbing requirements where certain design conditions are met. (Section 606.11.3) - D
- F61-04/05 - Proposes changes to requirements for ventilation , spill control, other for storage battery systems using lithium ion batteries. (Section 608). - A

F129-04/05 - Proposes addition of “in accordance with NFPA 96” to requirements for cleaning of hoods, grease removal devices, fans, ducts, etc (904.11.6.3)

F134-04/05 - Clarifies locations where fire extinguishers are required. Includes among other areas, special hazard areas, including but not limited to laboratories, computer rooms and generator rooms, where required by the fire code official. (Section 906.1) A

F135-04/05 - Proposes option of using supervised, listed electronic monitoring device in lieu of annual fire extinguisher maintenance. (Section 906.2) D

F180-04/05 - Proposes an entire new section for safety controls for subatmospheric gas systems based on reduced hazard potential (Section 1803.16 (new) -D

F181-04/05 - Proposes increase in allowable storage quantities in HPM fabrication areas by restricting quantities in excess of existing code limits in liquid storage rooms, HPM rooms, or gas rooms as appropriate for the materials stored. (Section 1804.2.2.2). - A

F182-04/05 - Proposes changes to open and closed system chemical baths due to increase in wafer sizes. (Table 1805.2) - A

F186-04/05 - Proposes changes to appropriate references for requirements for cryogenic gases. (Sections 2209.2.1, 3201.1, 3501.1, 4001.1) -A

F192-04/05 - Proposes addition of continuous monitoring system for hydrogen gas in(IFC 2211.7.1.1, IMC (F) 502.16.1).-D

F202-04/05 - Proposes change to specify availability / updating, of Hazardous Materials Management Plan and Hazardous Materials Inventory Statements for access by emergency responders (Section 2701). -D

F205-04/05 - Proposes limits for radioactive isotopes in control areas (Table 2703.1) -D

F206-04/05 - Proposes a new section and exceptions for testing requirements for emergency control and detection systems (Section 2703.2.9) - A

F208-04/05 - Proposes increase to quantity of pyrophoric gases before requiring detached storage (Table 2703.8.2) -D

F209-04/05 - Proposes change to the definition of control areas (Section 2703.8.3). -D

F213-04/05 - Proposes new section stating requirements for the design, construction, testing, marking, and maintenance of pressure vessels (Section 3003.2). -A

F230-04/05 - Proposes to allow Class 1 liquids in basements if in accordance with limits in Table 2703.1.1(1) and provided that automatic suppression and other fire protection are provided in accordance with Chapter 9. (Section 3404.3.5.1) -A

F231-04/05 - Proposes to allow Class 1 liquids in basements if in accordance with a new section 3404.3.5.2. This section provides suggested text on separation, ventilation, storage, secondary power, container sizes, storage cabinets, sprinkler protection, duct fire suppression, among other topics as well as proposing to add a new section with definitions for laboratory and laboratory unit. (Section 3404.5.1, 3404.3.5.2(new), 3402.1(new)). -D

F233-04/05 - Proposes new section to permit alcohol based rubs in corridor mounted dispensers. Includes specifications for mounting dispensers (Section 3405.5 (new)). =A

F234-04/05 - Adds several gas usage applications to list of those which are covered by sections other than 3501.1. Among these are pyrophoric gases, which are covered under Chapter 41. (Section 3501.1). -A

F236-04/05 - Proposes to remove text indicating that metal hydride storage systems (for storing hydrogen) be classified based on their hydrogen content and without regard to the metal hydride content. (Section 3501.6, 3502.1). -A

F239-04/05 - Clarifies that ozone gas used in an H-5 occupancy is regulated under Chapter 18 and not under Section 3705.1 (Section 3705.1).-A

International Mechanical Code

M16-04/05 - Addresses auxiliary and secondary drain systems where condensate is produced. Proposes water level detection devices in pans conform to UL 508. (Section 307.2.3). - A

M17-04/05 - Proposes water level detections devices in primary drain pan where installation of a secondary pan is not possible. (Section 307.2.3.1 (new) - AM

M19-04/05 - Proposes that ASHRAE Standard 62.1 be used as an alternative to Section 403 for design of mechanical ventilation systems with

calculations and documentation supporting design submitted to the code official for approval. (Section 401.2.1 (new). - D

M22-04/05 - Proposes that Section 6.3 of ASHRAE 62.1-04 be added as an additional design reference to Section 403.3 when the registered design professional wishes to reduce the minimum required rate of outdoor air. (Section 403.2.2). - D

M24-04/05 - Proposes that ventilation systems designed in accordance with ANSI/ASHRAE 62.1 be exempted from section 403.3. (Section 403.3) - D

M25-04/05 - Proposes that outdoor air requirements be increased and adds requirement for point of origin capture of odors for nail salons (Table 403.3).- A

M27-04/05 - Proposes that outdoor air rates be added for embalming rooms (Table 403.3). - A

M28-04/05 - Proposes that new sections be added to 403 to address variable air volume distribution systems. Includes use of carbon dioxide sensors for feedback - adjustments on outdoor air rates as well as other design, hardware, balancing, and documentation issues. (Section 403.3.3 , 403.3.4 and various new sections within). - D

M29-04/05 - Proposes that mechanical ventilation need not be provided for enclosed garages meeting natural ventilation requirements of Section 402 and other parameters (Section 404.1).- D

M30-04/05 - Proposes that text that requires air conditioning systems maintain proper amounts of outside air be modified to include heating systems as well so that proper outside air will be maintained during heating season as well as cooling season. (Section 405.1) - D

M31-04/05 - Proposes that new sections be added to 405 to assure that mechanical ventilating systems of 2500 cfm or greater and intended primarily for human occupancy, provide for close to neutral pressurization and so that total exhaust does not exceed total intake. (Section 405.2 (new). – D

M35-04/05 - Proposes next text regarding distances for location of exhaust outlets and modification of text for exhaust discharge. (Sections 501.2.1 and 501.2) - D

M37-04/05 - Proposes to expand requirements for direct connection of local exhaust to stationary motor vehicle exhausts and vents to those which are mobile for 10 seconds or greater indoors, excepting open air garages, public garages, and dwellings not contained with four walls. (Section 502.14). - D

M39-04/05 - Proposes to replace text describing attributes of non-sparking fans for use then fans are in contact with explosive or flammable vapors, fumes, or dusts with a requirement for spark-resistant construction in accordance with AMCA 99-0401-86.. (Section 503.2) - D

M67-04/05 - Proposes to add an exception for valve-regulated lead-acid battery systems which are part of a UPS in an information technology environment and conforms to IFC 608, from the requirements for providing a hazardous exhaust system. (Section 510.2). - D

M68-04/05 - Proposes to add “ducts” to the requirement that common shafts not be used for hazardous exhaust and other duct systems unless such systems are hazardous exhaust systems originating in the same fire area. (Section 510.4). - D

M69-04/05 - Proposes to add text to clarify that fire dampers are not required at penetrations of fire-resistance rated assemblies for hazardous exhaust systems. (Section 510.6.4) - A

M70-04/05 - Proposes an exception to permit collectors in independent exhaust systems handling combustible dusts to be installed indoors if installed in compliance with the IFC and ICC Electrical Code. (Section 511.1.1). - A

M71-04/05 - Proposes to add text to permit recirculation of air from exhaust from conveying systems provided contaminants have been removed a minimum efficiency of 99.9 percent at 10 microns, vapor concentrations are less than 25% of LEL, and approved equipment is used to monitor the vapor concentration. (Section 511.1.3) – A

M73-04/05 - Proposes to revise text to permit recirculation of air from exhaust if in compliance with sections 510 and 511. (Section 514.2) – A

M98-04/05 - Proposes adding the minimum emergency ventilation rate to text describing requirements for ammonia machinery room ventilation. The existing text provides an exception from the requirement for continuous ventilation of the area if in conformance with Class 1, Division 2. (Section 511.1.1). - D