

Mr. Michael Pfeiffer
ICC, Inc.
Code Development
4051 West Flossmoor Rd
Country Club Hills, IL 60478-5795

Sept 22, 2003

Dear Mr. Pfeiffer,

On behalf of the American Industrial Hygiene Association Laboratory Health and Safety Committee and the many experienced laboratory designers and engineers who support this proposal, we are filing this appeal request pertaining to code change request M55-03/04, discussed at the ICC Public Hearing held in Nashville, Tennessee on 9/5/03. The adverse effect of the committee ruling will be borne by occupants and maintenance workers residing in and performing roof located maintenance work on laboratory buildings. We request the following action in the interest and on behalf of building personnel safety:

Immediate reversal of the IMC Code Committee decision of “disapproved” to “approved” of either the original code change proposal or the revision provided at the public hearing (attached) in the interest of the safety of persons who work and /or perform maintenance work on laboratory ventilation systems in research laboratories. A committee approval of our proposal with or without the modification provided at hearing, will help to avoid the further installation of less protective exhaust ventilation systems and their compromise of building occupant and maintenance personnel safety.

This appeal request is based on the following substantive and procedural actions and inactions of the IMC code committee prior to and at the 9/5/03 public hearing.

1. Upon receiving our copy of the ICC 2003/2004 Proposed Changes to the International Codes, we noted that the Analysis section stated “The proponent had not submitted the standards for staff review prior to the printing of the monograph.” In March 2003 we had been advised by the ICC that our proposal had been received and was complete. ICC officials, who have been continuously courteous and helpful, do not recall this. However, even in the event that this did not occur, the proponent is to be advised that the items have not been submitted. No contact for this proposal received such notification. Based on this, IMC committee members were mailed a hard copy by the proponent less than three weeks prior to the hearing. Not all committee members read this information prior to the hearing and were unprepared to reach an informed decision.

2. The supplemental information in our proposal, as printed in the document, second to last paragraph states **“By requesting exemption for laboratory scale operations, yet not modifying any of the other content of IMC 510, the application of hazardous exhaust system requirements for other operations is preserved, while exempted laboratories would be covered in an equivalent or superior fashion by these other standards that have been developed specifically for such laboratory environments.”** This was the foundation of our argument and was reemphasized by the proponent during the 2 minute time frame allotted. The IMC code committee member who offered a dissenting argument for this proposal indicated that the exemption for laboratories for duct extinguishment would change the entire code. This is certainly not correct as indicated above. The only exemption would be for laboratories which met the definition of a laboratory and retained duct concentrations of less than 25% LEL in ductwork (as we left reference to section 510.3 in our proposal to make this clear). It was noted in earlier testimony by the proponent that labs would be exempted from duct extinguishment since the proposal stated that labs would follow NFPA 45. NFPA 45 does not, and has not for many years, recommended duct extinguishment (for labs) due to a variety of reasons. While proponent testimony time did not permit elaboration on these reasons, they were detailed in the reference materials provided prior to the hearings. After this incorrect and damaging testimony by the code member, the proponent asked for time to respond. The moderator agreed. Before the proponent could reach the microphone the code committee member who offered the incorrect information made a point of order motion that the proponent not be allowed to speak on the basis that the code member had not offered any new information. His objection was upheld and the proponent was not permitted to speak. In reality, the opportunity to speak was indeed appropriate since the committee member did offer new information, an account exactly the opposite of what the proponent stated. The committee then voted, influenced by this incorrect information and additional inappropriate information as noted below, with no chance for proponent to clarify.
3. In addition to the comment and repercussions referenced above, the statements in opposition to the proposal that were provided by same code member were not grounded in the interest of public safety or building safety and are inappropriate grounds for disapproval. These included:
 - C “Code officials will have to get familiar with NFPA 45”. There were two references to NFPA 45. The first was to NFPA 45, Chapter 6. NFPA 45, in effect for over 25 years, deals specifically with laboratory ventilation. No chapter in the IMC, including IMC 510 deals specifically with lab ventilation. The only other reference to NFPA 45 was a reference to use the one sentence definition of laboratory, contained in NFPA Chapter 1. This sentence is the same as the sentence used in the OSHA lab standard to defined a laboratory. It was done that way for consistency and is certainly appropriate. The 2000 IMC Code Commentary, in reference to the introductory paragraph of IMC

510 (510.1) , states “NFPA 45 provides additional guidance for the regulation of laboratory exhaust systems.” To allude to reference to this primary and longstanding code on laboratory ventilation, the same reference listed in the IMC Code Commentary, as a problem and as grounds for disapproval was shocking and inappropriate.

C “Code officials will have to get familiar with ANSI Z9.5” This is an ANSI standard. The first edition was published over 10 years ago. It is specific to laboratory ventilation. It was developed through a process of public comment by a committee which includes persons who have spent their careers dedicated to laboratory ventilation. It is a means to address the topic of toxic materials which are inappropriately, and as demonstrated in proponents testimony, dangerously addressed in the current code. The International Codes contain many references to other design standards such as ASTM, ASHRAE, and NFPA. Reference to this ANSI standard is appropriate and is certainly inappropriate grounds for disapproval. These comments suggest an ICC process which gives primary weight to easily enforceable, even if inappropriate language, over language most suitable to safe design. This is not appropriate rationale for disapproval.

C “Its unenforceable as written”. This was stated, supposedly in reference to having to be familiar with the standards noted above. With regard to something unenforceable, the proponent alluded to two examples of application of definition 3 of section 510.2. In each case the code official would need to be able to estimate the airborne concentration of a material in a building not yet constructed and compare this to 1% of the LC 50. Enforceable ? The proponent provided an example in which, even if a designer or code official was able to perform such concentration projections, the code would compel the laboratory to implement a hazardous exhaust system for one material that is at only 1% of its OSHA allowable concentration and would not require an exhaust system for a material that exceeds OSHA allowable limits by over 300%. This is an unsafe condition driven by IMC 510.

4. The code committee recommended that we reconsider wording and come back next year. This is inappropriate because for the reasons provided, our organization will not want to reword the proposal as it would only make it less likely for passage. In its present form, as stated earlier, our request simply requests that laboratories follow the other guidelines that have been written for them specifically, and would not change IMC 510 for non laboratory operations. In its present form it requests exemption from labs based on a definition of laboratories already in effect in NFPA 45 and the OSHA lab standard. The code committee certainly gave no guidance as to what they objected to, other than the inappropriate and erroneous input from one code official that we reference above.

This ends the rationale for our appeal, which is based primarily on items 1 and 2 above, and further supported by item 3.

Item 4 indicates why there is no rationale for waiting another year, or even until the final action hearing next May, on this proposal considering its impact on current design. Bad design, excessive cost, and personal risk is presently being designed into new laboratory buildings that are forced to comply with this code. Many articles have been written by experienced laboratory design professionals on this subject, expressing safety concerns and excessive and unwarranted costs in publications such as Chemical Health and Safety by the American Chemical Society and HPAC Engineering. Proponents who spoke at the public hearing included code officials, code consultants, and industrial hygienists from the midwest, northeast, and southeast. There were no comments in opposition provided from the floor. This is an issue that has widespread concern by those in states where this code is presently in effect and those where it will soon be going into effect.

As this is a matter related to reducing safety risk, we are not aware of individuals or organizations which may be negatively affected by this appeal, in fact none voiced opposition at the public hearing. A principal organization which represents a considerable portion of the population of research laboratories is the American Chemical Society. The best contacts for this organization are their Chemical Health and Safety Division and Committee on Chemical Safety. The addresses of the present chairs are attached to this mailing for contact purposes.

We finish by pointing out that one of the code committee members, when discussing other IMC revision proposals having to do with ventilation, spoke of his concern about "turning back the clock on safe design". Ironically, one of the articles in HPAC Engineering, which was provided to the code committee, included a statement about IMC 510 "could turn the technology clock back 25 years and create potentially dangerous work environments". While we appreciate the sincerity of all code committee members and other members of the ICC in serving to uphold your motto of "Setting the Standard for Building Safety", this committee action was inappropriate and unintentionally contrary to this goal.

We hope that you can move quickly to reverse this decision before more laboratory building designs are completed according to this section, important design features omitted, and subsequently the safety of future occupants and maintenance workers is negatively affected.

Thank you in advance for your prompt consideration. Our \$100 filing fee is attached.

Ken Kretchman, CIH, CSP on behalf of
American Industrial Hygiene Associate Laboratory Health and Safety Committee