

M55-03/04

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Comment: In general, we strongly support M55-03/04 based on the reasons stated in the code change. However, we propose the following revisions to this proposed code change:

Proposed

Revision 1: Delete references to 29 CFR 1910.1450 by revising proposed change M55-03/04 as follows:

510.1 General. This section shall govern the design and construction of duct systems for hazardous exhaust and shall determine where such systems are required. Hazardous exhaust systems are systems designed to capture and control hazardous emissions generated from product handling or processes, and convey those emissions to the outdoors. Hazardous emissions include flammable vapors, gases, fumes, mists or dusts, and volatile or airborne materials posing a health hazard, such as toxic or corrosive materials. For the purpose of this section, the health-hazard rating of materials shall be as specified in NFPA 704.

Exception: This section shall not apply to laboratory ventilation systems in research laboratories that comply with all of the following:

1. ~~The laboratories involve only laboratory scale use of substances as defined in 29 CFR 1910.1450.~~ The research laboratory is defined in accordance with Chapter 1 of NFPA 45.
2. A laboratory ventilation system is provided to control health hazard emissions ~~in accordance with 29 CFR 1910.1450.~~ Such exhaust system shall not recirculate to other areas and the entire system from the laboratory to the exhaust terminal shall operate under negative pressure.
3. The laboratory ventilation system required by Item 2 is designed, constructed and operated in accordance with Chapter 6 of NFPA 45 and ANSI/AIHA Z9.5 and complies with Sections ~~501.2 and 510.3~~ of this code.

Reason: The intent of referencing the OSHA (28 CFR 1910.1450) definition in the M55-03/04 proposed change is to ensure that the exception is only utilized by research laboratories using “laboratory scale” chemicals.

"Laboratory scale" means work with substances in which the containers used for reactions, transfers, and other handling of substances are designed to be easily and safely manipulated by one person. "Laboratory scale" excludes those workplaces whose function is to produce commercial quantities of materials.

NFPA 45 (2000 Edition) also contains this definition and general scoping provisions which limit the applicability of that standard to research laboratories. In addition, it is likely that many architects, engineers, building officials, and fire officials are not familiar with this OSHA regulation and referencing this document may add an additional level of complexity to the laboratory design and code enforcement process.