Dear Steve Luzik,

Thank you for your inquiry regarding Chapter 12 of the 2008 edition of NFPA 484 and its applicability to steel, iron, and brass. The following information has been provided by NFPA 484 Committee members for your use and reference.

The 2009 edition of NFPA 484, Section 12.2.1.4.3 references Section 12.2.4.16 for the requirements for personal protective equipment (PPE). Section 12.2.4.16 is for melting and casting operations. Section 12.2.1.4.3 probably should have referenced Section 12.6 for required PPE.

The proposed 2012 edition of NFPA 484 has revised the layout of the chapters. The requirements for PPE are addressed in Section 14.1.3 for combustible metals that are not specifically address by the standard. The requirements of this proposed section read as follows:

14.1.3 Personal Protective Equipment (PPE).
14.1.3.1 Operating and maintenance procedures shall address PPE for tasks involving processing or handling of combustible metal dust or molten metal.
14.1.3.1.1 A hazard assessment shall be conducted to evaluate the level of PPE required for the particular operation.

14.1.3.2 Combustible Metal Dusts.
14.1.3.2.1 PPE shall include flame-resistant garments in accordance with the workplace hazard assessment required by NFPA 2113, Standard on Selection, Care, Use, and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire.
14.1.3.2.2 Where a dust explosion hazard or dust flash fire hazard exists, flame-resistant garments shall be required for all exposed personnel.
14.1.3.2.3 Outer garments shall be clean and static dissipative where combustible metal dust is present.
14.1.3.2.3.1 Outer garments shall be designed to be removable.
14.1.3.2.3.2 Outer garments containing wool, silk, or synthetic fabrics that can accumulate high static electric charges shall not be used.
14.1.3.2.4 Garments shall be designed to minimize the accumulations of combustible metal dust (e.g., trousers shall not have cuffs).
14.1.3.2.5* Safety shoes shall be static-dissipative, where necessary, shall have no exposed metal, and shall be appropriate for the type of operation taking place.

14.1.3.3 Molten Metal.
14.1.3.3.1 Operators in melting and casting areas where there is an opportunity for the operator to come into contact with molten metal shall wear flame-resistant garments, high top leather safety shoes (minimum 6 in. high shoe), and face protection.
14.1.3.3.2 Garments worn where molten metal is present shall have no exposed pockets or cuffs that could trap and retain metal.

Note that a hazard assessment is required for specific operations to determine that appropriate PPE that is required.

Thank you for using NFPA codes and standards. I hope this information is useful for your purposes. This response should not be construed as a Formal Interpretation as stated below.

Regards,

Martha H. Curtis

Martha H. Curtis
Senior Chemical Specialist/Staff Liaison to NFPA 484
From: Steve Luzik [mailto:sluzik@chilworth.com]
Sent: Thursday, December 23, 2010 12:40 PM
To: Curtis, Martha
Subject: One more NFPA 484 question

Martha

Sorry to keep bothering you but I have one more question on the standard. I am in the process of developing a combustible dust checklist for a client and this is why these questions keep popping up.

With regard to Personal Protective Equipment requirements, Chapter 6 for Aluminum dusts requires PPE as per Section 6.3.2.5.1 (B) where individual dust collectors are located indoors. Item (B) states that Personnel protective clothing shall comply with 6.6.2. Section 6.6.2 outlines clothing and safety shoe requirements.

Chapter 12 for other Combustible Metals also has a section that references portable collection devices that may be used indoors and also makes reference to a personnel protective clothing requirement (12.2.1.4.3 - Personnel protective clothing shall comply with 12.2.4.16) 12.2.4.16 is in the Section on Melting and casting Operations and requires flame resistant clothing, high foundry shoes and face protection. Section 12.6 outlines requirements for Personal Protective Equipment and the requirements essentially parallel those of Chapter 6.6.2 for PPE in areas where the portable dust collection systems are used. My question is, did the standard inadvertently reference 12.2.4.16 for areas where portable dust collection is used and should the reference be 12.6? If this is not the case then the requirements for PPE seem to be too restrictive and moreover there is no connection to 12.6 any other place in the Standard.

Please help me understand this requirement.
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