NFPA 2-2023 Edition
Hydrogen Technologies Code
TIA Log No.: 1784
Reference: 7.3.2.3.1.4(A)
Comment Closing Date: August 21, 2024
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1. Revise paragraph 7.3.2.3.1.4(A) to read as follows:

7.3.2.3.1.4(A)* Passive Means. The distances to Group 1 and Group 2 exposures shown in Table 7.3.2.3.1.2(B)(a), Table 7.3.2.3.1.2(B)(b), and Table 7.3.2.3.1.2(B)(c) shall be permitted to be reduced by one-half, and the distance to Group 3 exposures in Table 7.3.2.3.1.2(B)(a), Table 7.3.2.3.1.2(B)(b), and Table 7.3.2.3.1.2(B)(c) shall be permitted to be reduced to 0 ft (0 m), where fire barrier walls are located between the system and the exposure and constructed in accordance with all of the following:

…

Substantiation: This proposed TIA changes the allowable reduction in separation distances for Group 1 and Group 2 exposures from "0 feet" to the original "one-half" from the 2020 edition of NFPA 2. Similarly, the proposed TIA adds the statement that the separation distances shall not apply for Group 3 exposures which was also in the 2020 edition of NFPA 2. These changes also remove a conflict with the 2023 edition of NFPA 55 (paragraph 10.4.2.2.4.1) and are consistent with the similar barrier wall reductions to liquid hydrogen setback distances agreed to in the Second Draft Meeting of NFPA 2. These changes were made during the First Draft of the 2023 NFPA 2 edition as part of First Revision 133. First Revision 133 refers to Public Inputs 218 and 232 as the basis. Neither Public Input 218 nor 232 proposed revisions to the first paragraph of 7.3.2.3.1.4 (A) and did not refer to allowable barrier wall reductions for Group 1, 2 or 3 Exposures. The Committee Statement did not mention this additional change and it did not provide any documented rationale or technical substantiation. The text in 2023 NFPA 2 is unsafe because it allows separation distance to be reduced to zero rather than the previous 50% reduction. For example, with the 2023 edition, the separation distance to an openable window or door drops to 0 feet, thereby deleting this safeguard and increasing the probability of a flammable cloud entering a building.

Emergency Nature: The standard contains an error or an omission that was overlooked during the regular revision process. The NFPA Standard contains a conflict within the NFPA Standards or within another NFPA Standard. The proposed TIA intends to offer to the public a benefit that would lessen a recognized (known) hazard or ameliorate a continuing dangerous condition or situation. The proposed TIA intends to correct a circumstance in which the revised NFPA Standard has resulted in an adverse impact on a product or method that was inadvertently overlooked in the total revision process or was without adequate technical (safety) justification of the action.

The current text allows for a barrier wall reduction to 0 feet for Group 1 and Group 2 Exposures without technical substantiation. This creates a public hazard since barrier walls may be installed that incorrectly reduce separation distances between bulk hydrogen systems and exposures such as window openings and exposed personnel who are members of the general public. The current text also deletes the previously allowable reduction to 0 feet for Group 3 Exposures which had previously been included in the 2020 and earlier editions of NFPA 2. This

will have an impact on users and approvers attempting to successfully install and permit bulk hydrogen systems and could improperly have a significant effect on many projects. The current text is also in conflict with similar text in NFPA 55 which creates a confusing contradiction for both users and approvers.

Anyone may submit a comment by the closing date indicated above. Please identify the TIA number, state whether you SUPPORT or OPPOSE the TIA along with your comment, and forward to the Secretary, Standards Council. SUBMIT A COMMENT