PI-04-0108

U.S. Department of Transportation Research and Special Programs Administration 400 Seventh St., S.W. Washington, D.C. 20590

December 29, 2004

Mr. Jim Hotinger Senior Utilities Engineer Virginia State Corporation Commission P.O. Box 2118 Richmond, VA 23216

Dear Mr. Hotinger:

This is in response to your letter of December 23, 2004, in which you request an interpretation of the definition of "important buildings" as used in the 1998 edition of NFPA 59, Standard for the Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants. This standard is incorporated by reference in the gas pipeline safety regulations at 49 CFR 192.11, Petroleum gas systems.

Section 192.7 of the regulations makes clear that "... any documents or portions thereof incorporated by reference in this part are included in this part as though set out in full." Therefore, a gas pipeline operator subject to 49 CFR Part 192 is obligated under § 192.11 and § 192.7 to comply with Table 3-5.1 of NFPA 59A (1998). This table requires that a refrigerated LPG tank with a capacity of more than one million gallons must be at least 400 feet from any "important buildings." However, this term is not defined in NFPA 59 or in any final rule or interpretation issued by the Office of Pipeline Safety (OPS).

We have reviewed the letters you enclosed from James H. Stannard, Jr. who was chairman of the NFPA technical committee responsible for drafting NFPA 59 (1998), and from Theodore C. Lemoff, Staff Liaison, National Fire Protection Association (NFPA). Both agree that the term "important buildings" refers to significant buildings frequented by the public that are not associated with a gas plant, such as office buildings, factories, schools, prisons, and the like.

We agree with Mr. Stannard and Mr. Lemoff that "it would have made little sense, in the days when process control was either direct or through pneumatic instrumentation, to require such a separation distance for buildings or structures associated with the [gas] facility, particularly for those housing process and control functions." Therefore, for purposes of the gas pipeline safety regulations, "important buildings" does not include buildings associated with the gas plant, such as control rooms, compressor buildings, motor control centers, warehouses, and fire pump houses.

If you have any further questions about the pipeline safety regulations, please contact me at (202) 366-4565.

Sincerely, Richard D. Huriaux, P.E. Director, Technical Standards Office of Pipeline Safety Commonwealth of Virginia State Corporation Commission Tyler Building 1300 East Main Street Richmond, VA 23219-3630

December 23, 2004

Mr. Richard Huriaux Director, Technical Standards Office of Pipeline Safety 400 Seventh Street, Room 2103 U.S. Department of Transportation Washington, D.C. 20006

Dear Mr. Huriaux,

I am writing to request an interpretation from the Office of Pipeline Safety ("OPS") relative to the definition of the words "important buildings" in the 1998 Edition of NFPA 59, as incorporated by reference in 49 C.F.R. § 192.7. Certain background information is needed to provide the necessary information for your review.

Pivotal Propane of Virginia, LLC ("Pivotal") is constructing a new propane-air plant in Chesapeake, Virginia, which will supply a propane-air mixture to Virginia Natural Gas, Inc. ("VNG"), a Virginia public service company. As you are aware, 49 C.F.R. § 192.11(a), states that "[e]ach plant that supplies petroleum gas by pipeline to a natural gas distribution system must meet the requirements of this part and ANSI/NFPA 58 and 59."

The Pivotal propane-air facility will employ a 3,300,000-gallon refrigerated tank for the storage of liquid propane. Under Table 3-5.1 of NFPA 59 (1998 Edition), a refrigerated tank with a capacity of more than 1,000,000 gallons must be at least 400 feet from "important buildings." Table 3-5.1 does not contain a precise definition of what constitutes an "important building."

The definition of an important building is important to the design of any propane- air facility. In this case, the Pivotal refrigerated tank is located less than 400 feet away from the facility's control room, compressor building, motor control center, warehouse building, and fire pump house. As the term "important building" is not defined in the 1998 edition of NFPA 59, we have been working with Pivotal to determine what the proper definition is.

Pivotal has provided the State Corporation Commission ("SCC") Staff with a letter from Mr. James H. Stannard, Jr., who was the chairman of the NFPA's Technical Committee which drafted the 1998 version of NFPA 59. A copy of Mr. Stannard's letter is attached.

In Mr. Stannard's letter (copy attached), he states, among other things, that "[i]t is my opinion that the statement "not associated with the LP-Gas plant" reflects the intent of most of us on the [NFPA 59] Committee with respect to the concept of an 'important building'." He goes on say that "[i]t would have made little sense, in the days when process control was either direct or through pneumatic instrumentation, to require such a separation distance for buildings or structures associated with the facility, particularly for those housing process and control functions."

Mr. Stannard also noted that in Section 2 of the NFPA 59 (1998 edition), the term "...important building or group of buildings not associated with the LP-Gas plant" is used. It appears in Section 2-4.1.2 and Table 2-4.1.2 of NFPA 59

(1998 edition). Pivotal has also provided the SCC Staff with a letter (copy attached) from Theodore C. Lemoff, NFPA Staff Liaison, to Mr. Stannard regarding the meaning of the term "important buildings."

In his response, Mr. Lemoff says that "...control buildings or vaporizer buildings should not be considered to be important buildings." However, Mr. Lemoff went on to say that this "...is the personal opinion of the author, and does not necessarily represent the official position of the NFPA or its Technical Committees."

Because the issue of the proper definition of "important buildings" arises as a result of the spacing of buildings associated with Pivotal's facility, we are requesting an interpretation regarding whether, in the 1998 edition of NFPA 59, an "important building" includes buildings associated with the gas plant such as the control room, compressor building, motor control center, warehouse building, and fire pump house. This will enable the SCC Staff to determine whether the Pivotal facility will need a waiver in order to continue into operation.

We hope that we can resolve this issue quickly, as this facility may be needed by VNG to meet its load requirements for the 2004/2005 heating season. Please provide us with a response as soon as possible. Should you have questions or comments, please let us know.

Sincerely, James M. Hotinger, PE Senior Utilities Engineer November 11, 2004

Mr. Massoud Tahamtani Division of Energy Regulation Virginia State Corporation Commission 1300 East Main Street Richmond, VA 23219

Dear Mr. Tahamtani:

I have been asked to provide you with an opinion regarding my interpretation of section 3-5 of the 1998 Edition of NFPA 59, "Standard for the Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants." I gather that your interest relates to the spacing of "important buildings" with respect to refrigerated propane containers.

I have been a member of the NFPA Technical Committee responsible for that Standard for several decades and I served as Chair of the Committee during the period in which the '1998 edition was promulgated. I also played a role in the adoption of both NFPA 58 and 59 into 49CFR Part 192 by the Department of Transportation. In spite of that involvement, I must state, without reservation, that any opinions or comments expressed in this letter are my own and that they should not be considered the official position of the Committee or the National Fire Protection Association. Such a statement, or position, would require a request for a "Formal Interpretation" (FI), which would result in a formal balloting of the entire Committee.

Sub-section 3-5.1 states in part: "Spacing of refrigerated propane containers from important buildings, storage containers ....shall be in accordance with Table 35.1." Then Table 3-5.1 indicates that such spacing for a container of the size proposed for the Pivotal Propane facility would be 400 feet (122 meters). Apparently there seems to be some question as to what constitutes an "important building: The term has not been specifically defined in the standard, even though it appears several times within the text, thereby leaving some question as to the Committee's intent.

Sub-section 2-4.1.2, of the standard, reads:

Containers shall be located in accordance with Table 2-4.1.2 with respect to the distance between containers, the distance between containers and the nearest important building or group of buildings not associated with the LP-Gas plant, or a line of adjoining property that can be built upon." (Italics added for emphasis.)

It is my opinion that the statement "not associated with the LP-Gas Plant" reflects the intent of most of us on the Committee with respect to the concept of an "important building." It should also be noted that a similar statement is included in the header of Table 2-4.1.2. 1 would be inclined to believe that most of us would consider an important building, in this particular context, to be an office building housing many workers or a building open to, and frequented by, the general public. It would have made little sense, in the days when process control was either direct or through pneumatic instrumentation, to require such a separation distance for buildings or structures associated with the facility, particularly for those housing process and control functions,.

It is my belief that the apparent ambiguity regarding "important buildings" occurred as a result of an editorial slip-up when a complete update of the refrigerated storage portions of both NFPA 58, "Liquefied Petroleum Gas Code," and NFPA 59 was undertaken. That reworked version was placed in NFPA 58 and abstracted into NFPA 59. The effort was jointly undertaken by the two Committees and, I am sure, the issue of "important buildings" was overlooked while the more contentious technical issues were considered. That rewrite and move to NFPA 58 came about as a result of the recognition of the importance of the numerous non-utility LP-Gas import terminals that had been built or were contemplated.

I have reviewed the Site Plan drawings that have been provided to me and it is my opinion that building and container spacing does comply with the intent of Section 3-5 of the 1998 edition of NFPA 59. Please feel free to call on me if you have any additional questions to ask regarding this subject.

Sincerely, James H. Stannard, Jr. National Fire Protection Association 1 Batterymatch Park Quincy, MA 02169-7471

December 9, 2004

Mr. James H. Stannard, Jr. Stannard & Company P.O. Box 2185 Lawrenceville, GA 30046-2185

Dear Mr. Stannard,

I have reviewed your request for an informal interpretation of NFPA 59-1998, Standard for the Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants. I am pleased to offer the following.

## You asked:

In the 1998 edition of NFPA 59, "Standard for the Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants," the term "important building" appears in 2-4.1.2 (5.4.1.2) and its associated table, 2-4.2.4 (5.4.2.4), 3-5.1 and 4-3.4 (7.3.4). Would an "important building or group of buildings not associated with the gas plant," include such occupancies as an office building housing employees who are not directly associated with the operation of the LP-Gas plant, or a building that is either frequented by or open to the general public, as differentiated from plant buildings such as compressor buildings, control buildings or vaporizer buildings?

I reviewed the paragraphs you cited and believe that the answer is yes, an "important building or group of buildings not associated with the gas plant," includes the types of buildings you cite, while plant buildings such as compressor buildings, control buildings or vaporizer buildings should not be considered to be important buildings.

This correspondence is not a Formal Interpretation issued pursuant to NFPA Regulations. Any opinion expressed is the personal opinion of the author, and does not necessarily represent the official position of the NFPA or its Technical Committees. In addition, this correspondence is neither intended, nor should be relied upon, to provide professional consultation services.

Very truly yours, Theodore C. Lemoff Staff Liaison