BOARD OF APPEALS

December 3, 2015

Members Present: Chairperson Wayne Larson, Harold Thompsen, Jeff Furstenau, Joel Davy Others Present: Ron Strand, Ryan Erickson, Gretchen Morlan, Doug Nelson, Rob Severson, Bobbi Hepper Olson

Chairperson Larson called the meeting to order. Mr. Davy moved to approve the minutes of the November 19, 2015 meeting and Mr. Furstenau seconded the motion. All members present voted aye and the motion was declared carried. Mr. Strand introduced Ms. Morlan to the Board.

Mr. Erickson reviewed the common sizes for liquid carbon dioxide tanks and the displacement those sizes would create. He explained that the cost of the only local example for a three-channel radio system was just over \$78.000 but that a five-channel system would have cost more than \$110,000 or roughly \$.63 per square foot.

Item 1 – Review of the changes to the 2015 International Fire Code (IFC), Chapters 28-Appendices

Chapter 28

Mr. Nelson stated that there had been no significant changes to this chapter, but that the scope changed to include solid biofuel products

Chapters 29 and 30

Mr. Nelson stated that there had been no significant changes to these chapters.

Chapter 31

Mr. Nelson noted that the changes to this chapter had been in response to events in various locations.

Section 3103.9.1 is a new section that requires temporary multistory tents and membrane structures to comply with Chapter 16 of the International Building Code (IBC).

Section 3105 now includes the sentence: "Temporary stage canopies are now permitted and regulated under Chapter 31 and must have a structurally sound design."

Section 3105.1 includes a new section that describes with what codes temporary stage canopies are required to comply.

Section 3105.2 includes a new section requiring temporary stage canopies in excess of 400 square feet to be approved and permitted by both the fire and building officials prior to construction.

Section 3105.3 is a new section that requires temporary stage canopies to be permitted.

Section 3105.4 is a new section limiting temporary stage canopies to a period of more than 45 days.

Section 3105.5 is a new section that requires documents to be submitted to the fire code official and the building official for review before a permit is approved.

Section 3105.6 is a new section requiring that inspections comply with sections 3105.6.1-3105.6.2

Section 3105.6.1 is a new section that requires the owner of a temporary stage canopy to employ a

qualified, independent approved agency or individual to inspect the installation of a temporary stage canopy.

Section 3105.6.2 requires the independent inspector to furnish an inspection report to the fire code official. Any discrepancies not corrected are required to be brought to the attention of the fire code official and the designated responsible party. Mr. Strand asked about the sentence implying that the installation may not conform with approved construction documents. Mr. Erickson responded that they would take a look at the language and decide whether an amendment for clarification was necessary. Mr. Larson asked if such structures were common in this area and Mr. Erickson answered that they were not but that they had been added because they had not been specifically addressed in earlier editions.

Section 3105.7 is a new section that requires the means of egress for temporary stage canopies to comply with Chapter 10.

Section 3105.8 requires temporary stage canopies to be located a distance from property lines and buildings to accommodate distances indicated in the construction drawings for guy wires, cross bracing, ground anchors or ballast. Locations are not to interfere or encroach on occupant egress or fire apparatus access.

Chapter 32

Section 3203.2 polyethylene solid deck pallets were removed from this section. Mr. Erickson noted that the plastic pallets had previously been exempt but were found to contribute to the fire load in high-piled storage uses and were thus now regulated in the code.

Section 3206.4.1 now refers to NFPA 13 provisions to address the use of plastic pallets in high-piled combustible storage. Plastic pallets can affect the classification of the commodity.

Section 3206.4.1.1 Plastic pallets in accordance with UL2335 or FM 4996 shall be treated as wood pallets for determining sprinkler protection.

Section 3206.9.3 Specific limitations are now provided for dead-end aisles in high-piled combustible storage areas that are more restrictive than previous editions.

Section 3206.9.3 An exception was added for dead-end aisles where the length is less than 2.5 times the least width.

Chapter 33

Section 3306.2 Flammable gases shall not be used to clean or remove debris from piping open to the atmosphere.

Section 3306.2.1 Pipe cleaning and purging shall comply with NFPA 56 with the listed exceptions.

Chapter 34

Mr. Nelson stated that there had been no significant changes to this chapter.

Chapter 35

Section 3504.1.7 was modified to require that hot work on flammable and combustible liquid tanks be conducted in accordance with Section 3510.

Section 3510 is a new section for "Hot work on flammable and combustible liquid storage tanks".

Section 3510.1 now requires hot work performed on tanks that have held flammable or combustible liquids to be in accordance with Section 3510.2, IFC Chapters, 4, 5, 6, 7 and 10, and NFPA 326.

Section 3510.2 outlines specific steps to be taken to minimize hazards where hot work is performed on flammable or combustible liquid storage containers.

Chapter 36

Mr. Nelson stated that there had been no significant changes to this chapter.

Chapter 37 was moved from Chapter 52 in 2012 Edition but there were no significant changes.

Chapter 50

Table 5003.1.1(1) Several editorial revisions were made for consistency and uniformity between the IFC and the IBC but there were no substantive changes.

Chapter 51, Aerosols

Section 5101.4 Quantity limits for different types of containers. Previously located in Section 202 of the 2012 IFC for clarity.

Section 5104.1.1 Aerosol products are now allowed in plastic containers up to 33.8 fluid ounces, or 1 liter, in size. Special requirements must be met for specific products in plastic containers exceeding 4 fluid ounces. Mr. Severson noted that the requirements were based on the fire hazard of the fluid.

Chapter 53

Mr. Severson noted that changes were made to this chapter because of industry changes to normal CO2 systems, increasing the size.

Section 5307 is a new section added for the use of liquid carbon dioxide systems with more than 100 pounds of carbon dioxide in beverage dispensing applications.

Chapters 54 through 56

Mr. Nelson stated that there had been no significant changes to these chapters.

Chapter 57, Flammable and Combustible Liquids.

Section 5704.2.9.6.1 Staff recommends continuing the existing local **AMENDMENT** changing this section to read, "Above ground tanks outside of buildings shall be installed only in areas zoned industrial or limited industrial and shall be located at least 300 feet from all non-industrial zoned districts." This change is to match the Fargo Land Development Code (LDC).

Section 5704.2.9.7.3 was deleted as the requirements appear in other places in the 2015 IFC.

Section 5704.2.13.1.4 Staff recommends continuing the existing local **AMENDMENT** adding Subsection 7 as follows: "7. Site assessment is required to determine if there are any spills, leaks, or discharge from the tank system. Records of site assessment shall be kept on the site of tank location."

Section 5705.3.7.5.1 Staff recommends continuing the existing local **AMENDMENT** adding Exception 2 as follows: "Exception 2. When approved by the chief, continuous ventilation may be provided for one

complete air change per hour, if supplemented with mechanical ventilation designed to provide for a complete air change six times per hour. The non-continuous ventilation equipment and any lighting fixtures shall be operated by the same switch located outside of the door."

Chapter 58

Section 5806.2 Limitations. **Amended to read as:** Stationary containers shall be installed only in areas zoned industrial or limited industrial and shall be located at least 300 feet from all non-industrial zoning districts. To match LDC

Section 5808 is a new section that details the requirements of hydrogen gas rooms.

Chapters 59 and 60

Mr. Nelson stated that there had been no significant changes to these chapters.

Chapter 61

Section 6103.2.1.6 Staff recommends continuing the existing local **AMENDMENT** that increases self-contained torch assemblies to allow up to 12 pounds of water capacity, up from 2.5 pounds.

Section 6104.2 Staff recommends adding a new **AMENDMENT** to clarify requirements currently in the LDC, to read as follows: "Unprotected tanks with a water capacity exceeding 2,000 gallons shall be installed only in areas zoned industrial or limited industrial and shall be located at least 300 feet from all non-industrial zoning districts."

Chapter 62 through 69

Mr. Nelson stated that there had been no significant changes to these chapters.

Mr. Erickson noted that Appendices B, C, and D were the only additional content staff recommended adopting.

Appendix B

Section B105.1 was reorganized and reworded to reference new Table B105.1(1).

Section B105.2 was reorganized and reworded to reference new Table B105.2 and B105.1(2).

Table B105.1(1) is a new table containing fire flow requirements for both sprinklered and non-sprinklered buildings. The fire flow requirements have not changed.

Table B105.2 is a new table containing fire flow requirements for both sprinklered and non-sprinklered buildings. The fire flow requirements have not changed.

Section B105.3 is anew section requiring the minimum water supply to be capable of supplying the greater of: sprinkler system demand including hose stream, or the required fire flow.

Appendix C

Section C101.1 was reworded and a reference to section 507.5.1 added.

Section C102.1 was reorganized and reworded for clarity.

Section C103.1 was reorganized and reworded for clarity.

Section C104.1 was reorganized and reworded for clarity.

Table C102.1 includes two new footnotes allowing hydrant spacing to be increased 50% for NFPA 13 sprinklered buildings and 25% for NFPA 13R or NFPA 13D sprinklered buildings.

Appendix D

Section D103.1 Staff recommends adding an **AMENDMENT** deleting this section in its entirety as the access road width of 20' is adequate to accommodate access and fire hydrants.

Section D103.5 was reworded for clarity.

Section D106.3 The same remoteness requirements that were previously located in the commercial and industrial developments section were added to this section.

Section D107.1 was reworded for clarity.

Section D107.2 The same remoteness requirements that were previously located in the commercial and industrial developments section were added to this section.

Mr. Strand asked if there were any sections the Board had asked to revisit at the conclusion of the hearing process and Mr. Erickson responded that there were not. Mr. Thompsen asked about an e-mail sent to the Board proposing an amendment to the International Residential Code (IRC) and Mr. Erickson responded that they would address the amendment at the hearing for that section of the IRC rather than pulling it out of context now. There being no further business to come before the Board, the meeting was adjourned.

Respectfully submitted,

Ron C. Strand Board Secretary