



SAFETY CODES COUNCIL

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COUNCIL ORDER No. 0015435

**BEFORE THE BUILDING TECHNICAL COUNCIL
On October 17, 2013**

IN THE MATTER OF the Safety Codes Act, Revised Statutes of Alberta 2000, Chapter S-1.

AND IN THE MATTER OF the Order dated June 3, 2013 issued by an Accredited Municipality (Respondent) against Owners of an Equestrian Centre. (Appellant).

UPON REVIEWING the Order **AND UPON HEARING** the Appellant and the Respondent; **THIS COUNCIL ORDERS THAT** the Order is **VARIED**.

FROM:

You are hereby ordered to provide water for firefighting purposes with a dry hydrant within 90.0 meters of the building, before September 3, 2013.

TO:

You are hereby ordered to:

1. Immediately provide a fire watch in accordance with a fire safety plan approved by the Authority Having Jurisdiction, and
2. Provide water for firefighting purposes with a dry hydrant within 90.0 meters of the building, no later than June 1, 2014.

Issue:

1. The Appeal concerns a building described as an equestrian centre. The major occupancy classification under the Alberta Building Code 2006 is Group A, Division 3, up to 2 Storeys, non-sprinklered.

2. The order concerns the provision of water for firefighting purposes.

Preliminary or Procedural Matters:

3. Appearing for the Appellant, the Appeal Panel heard from the owner of the equestrian centre, and another family member.
4. Appearing for the Respondent, the Appeal Panel heard from the Building Safety Codes Officer, from the accredited municipality.
5. At the commencement of the hearing, the Appellant and Respondent each confirmed their agreement that there were no objections to any members of the appeal panel, and that the Safety Codes Council and the appeal panel had jurisdiction to hear and decide the appeal.
6. The Appeal Panel Chair read out a list of the written material before the panel, and the Appellant and the Respondent each confirmed that there were no objections to any of the written material submitted to the panel prior to the hearing.
7. At the beginning of the Respondent's presentation, the Respondent proposed submitting a package of documents into evidence. After the documents were shown to the Appellants, and they indicated there was no objection, the Appeal Panel Chair accepted the package into the Record and this was marked as Exhibit 1 – Respondent. The documents are:
 - (a) Building Permit Application entered April 17, 2008
 - (b) Building Permit dated April 21, 2008
 - (c) Building Code Analysis dated April 21, 2008
 - (d) Site Inspection Report “final” dated April 14, 2010
 - (e) Site Inspection Report “final” dated March 17, 2009
 - (f) Site Inspection Report “progress” dated July 28, 2008
 - (g) E-mail with water supply calculations dated April 22, 2010
 - (h) Engineer drawing SK-01 dated April 21, 2010
 - (i) Copy of the Order dated June 3, 2013; and
 - (j) Fax cover to the Building Technical Administrator dated June 3, 2013.
8. During the Appellant's presentation, the Appellants proposed submitting a signed copy of the engineer drawing of the “Property Dry Hydrant Installation” into evidence. After the document was shown to the Respondent, and the Respondent indicated that there was no objection, the Appeal Panel Chair accepted into the Record the signed drawing. At the Appellant's request, the signed original was given to the Respondent. The document was marked as Exhibit 1 – Appellant.

The Record:

9. The Appeal Panel considered, or had available for reference, the following documentation:
 - a) Exhibit #1 - Appellant

- b) Exhibit #1 – Respondent
- c) Change of Date Written Notification of Appeal Hearing dated July 23, 2013
- d) Written Notification of Appeal Hearing dated July 16, 2013
- e) Appeal Hearing Brief Preparation Guide
- f) Stay Letter dated July 5, 2013
- g) Acknowledgement Letter dated July 2, 2013
- h) Copy of Notice of Appeal dated June 17, 2013
- i) Copy of Order dated June 3, 2013

Provisions of the Safety Codes Act:

10. The Safety Codes Act provides:

Part 1 Responsibilities

Owners, care and control

5 The owner of any thing, process or activity to which this Act applies shall ensure that it meets the requirements of this Act, that the thing is maintained as required by the regulations and that when the process or activity is undertaken it is done in a safe manner.

Part 5 Orders, Appeals

Council considers appeal

52(2) The Council may by order

- (a) Confirm, revoke or vary an order, suspension or cancellation appealed to it and as a term of its order may issue a written variance with respect to any thing, process or activity related to the subject-matter of the order if in its opinion the variance provides approximately equivalent or greater safety performance with respect to persons and property as that provided for by this Act

Provisions of the Alberta Building Code 2006 (ABC 2006):

- 11. The applicable and current code is the Alberta Building Code 2006 (ABC 2006).
- 12. The Alberta Building Code 2006 and Appendix A to Division B thereto provides, *inter alia*:

Division B

Part 3 Fire Protection, Occupant Safety and Accessibility

3.2.5.5. Location of Access Routes

(1) Access routes required by Article 3.2.5.4. shall be located so that the principal entrance and every access opening required by Articles 3.2.5.1. and 3.2.5.2. are located not less than 3 m and not more than 15 m from the closest portion of the access route required for fire department use, measured horizontally from the face of the *building*.

- (2) Access routes shall be provided to a *building* so that
- (a) for a *building* provided with a fire department connection, a fire department pumper vehicle can be located adjacent to the hydrants referred to in Article 3.2.5.16.,
 - (b) for a *building* not provided with a fire department connection, a fire department pumper vehicle can be located so that the length of the access route from a hydrant to the vehicle plus the unobstructed path of travel for the firefighter from the vehicle to the *building* is not more than 90 m, and
 - (c) the unobstructed path of travel for the firefighter from the vehicle to the *building* is not more than 45 m.

(3) The unobstructed path of travel for the firefighter required by Sentence (2) from the vehicle to the *building* shall be measured from the vehicle to the fire department connection provided for the *building*, except that if no fire department connection is provided, the path of travel shall be measured to the principal entrance of the *building*.

(4) If a portion of a *building* is completely cut off from the remainder of the *building* so that there is no access to the remainder of the *building*, the access routes required by Sentence (2) shall be located so that the unobstructed path of travel from the vehicle to one entrance of each portion of the *building* is not more than 45 m.

3.2.5.7. Water Supply

(See Appendix A.)

(1) Except as required in Sentences (3) and (4), and except for a *building* that is neither more than 3 *storeys* in *building height* nor more than 600 m² in *building area*, a building shall have a supply of water available for firefighting purposes that is not less than the quantity derived from the following formula:

$$Q=V \times O \times S$$

where

- Q = minimum water supply (litres),
- V = total *building* volume (cubic metres),
- O = water supply coefficient (from Table 3.2.5.7.),
- S = spatial coefficient whose value is 1.5 for a *building* that has any *limiting distance* less than 7.5 m, otherwise whose value is 1.0.

Table 3.2.5.7.
Water Supply Coefficient
Forming Part of Sentence 3.2.5.7. (1)

Type of Construction	Classification by Group and Division in Accordance with Table 3.1.2.1.				
	A-1, A-3, F-3	A-2, B-1, B-2, C, D	A-4	E, F-2	F-1
	Applicable Water Supply Coefficient				
<i>A building of noncombustible construction with all loadbearing walls, columns and arches, having a fire-resistance rating at least equivalent to that required for the supported assembly, but not less than 45 min</i>	11	10	14	17	23
<i>A building of noncombustible construction in accordance with Article 3.1.5.1.</i>	17	15	20	25	34
<i>A building having all structural members of noncombustible material, or if of combustible material, a fire-resistance rating of at least 45 min, or of heavy timber construction</i>	22	19	27	34	45
<i>A building of combustible construction</i>	34	27	40	50	67

(2) The water supply required by Sentence (1) shall be capable of being delivered at a rate of not less than 45 L/s for a *building* required to have a quantity less than 75 000 L and at a rate of not less than 60 L/s for a *building* requiring a quantity of 75 000 L and greater.

Division B – Appendix A

A- 3.2.5.7. Water Supply. The intent of Article 3.2.5.7. is that an adequate water supply for firefighting be readily available and of sufficient volume and pressure to enable emergency response personnel to control fire growth so as to enable the safe evacuation of occupants and the conduct of search and rescue operations, prevent the fire from spreading to adjacent buildings, and provide a limited measure of property protection.

Sentences 3.2.5.7.(1) and (2) define the minimum water and flow requirements for buildings exceeding 3 storeys in building height or 600 m² in building area. NFPA 1142, "Water Supplies for Suburban and Rural Fire Fighting," and Fire Underwriters Survey, "Water Supply for Public Fire Protection - A Guide to Recommended Practice 1996," should be consulted to determine optimum values.

For a building with no internal fire suppression system, the determination of the minimum requirements applicable to the water supply for firefighting is relevant mainly to building sites not serviced by municipal water supply systems. For building sites serviced by municipal water supply systems, where the water supply duration is not a concern, water supply flow rates at minimum pressures is the main focus of this

provision. However, where municipal water supply capacities are limited, it may be necessary for buildings to have supplemental water supplies on site or readily available.

The water supply requirements for buildings containing internal fire suppression systems, including sprinkler systems and standpipe systems, are contained in specific standards referenced in Sentences (3) and (4). Compliance with the referenced standard, including any variations made by this Code, is deemed to satisfy the intent of Article 3.2.5.7. However, it will be necessary to verify that an adequate source of water is available at the building site to meet the required quantities and pressures.

The sources of water supply for firefighting purposes may be natural or developed. Natural sources may include ponds, lakes, rivers, streams, bays, creeks, and springs. Developed sources may include aboveground tanks, elevated gravity tanks, cisterns, swimming pools, wells, reservoirs, aqueducts, artesian wells, tankers, hydrants served by a public or private water system, and canals. Consideration should be given to ensuring that water sources will be accessible to fire department equipment under all climatic conditions.

The volume of on-site water supply is dependent on the building size, construction, occupancy, exposure and environmental impact potential, and should be sufficient to allow at least 30 minutes of fire department hose stream use.

Division C

2.2.10.2. Occupancy before Completion

- 1) The *authority having jurisdiction* may issue an *occupancy permit*, subject to compliance with provisions to safeguard persons in or about the *project*, to allow the *occupancy* of a *building* before completion of the *project*.
- 2) The *owner* shall ensure that no *unsafe condition* exists or will exist because of construction or *work* being undertaken or not completed should *occupancy* occur before the completion of the construction or *work*.

Position of the Parties

Appellant

13. The Appellant's position is that:

- a) The Appellant agrees to provide water supply for firefighting in compliance with the ABC 2006, but wants to have until June 1, 2014 to complete the construction.
- b) The optimum time to start the construction is late February or early March when the bog on the property is frozen. Starting in February or March will limit the impact on the property.

- c) The Appellant has been singled out by the Respondent. There are 25 other equestrian centres in the municipality that do not have water supply for firefighting and have not been ordered by the Respondent to provide it.
- d) It is unclear what the requirements are to construct a water supply. And when asked prior to the issuance of the Order, the Respondent did not provide any other examples to the Appellant of equestrian centres in the municipality with existing water supply for firefighting.

Respondent

14. The Respondent's position is that:

- a) The provision of water supply for firefighting is a requirement of the ABC 2006.
- b) The requirement was brought to the Appellant's attention through the permitting and inspection process.
- c) The order was issued because the Appellant did not comply with the conditions indicated on the building permit.

Reasons for Decision (Findings of Fact and Law):

The Appeal Panel makes the following findings:

15. The parties do not dispute the following facts, and the Appeal Panel finds them to be proven:

- i) The Appellant applied for a building permit for the building on April 17, 2008;
- ii) The Respondent issued a building permit with conditions to the Appellant on April 21, 2008;
- iii) The Appellant is aware that a design for water supply is required. This requirement was identified to the Appellant in the building permit issued on April 21, 2008, and in subsequent inspection records on March 17, 2009 and April 14, 2010;
- iv) The building was constructed in 2009 and does not have a water supply for firefighting compliant with the Alberta Building Code;
- v) The Appellant provided two engineer design drawings for a water supply for firefighting. The first one was provided through the building permit process and the second drawing was provided with the Appellant's submission for hearing. In testimony the Appellant indicated concerns with the original engineer design drawing;
- vi) Interim fire safety measures such as a fire watch are not currently in place. The Respondent did not request any interim fire safety measures on the order of June 3, 2013, or when the building permit was issued;

16. The building is required to have a supply of water available for firefighting purposes in such quantity as required by Section 3.2.5.7 of Division B of the ABC 2006, to control fire growth to enable the safe evacuation of occupants and to prevent the spread of fire.

17. The water supply for a non-sprinklered building greater than 600 m² is required to be within 90 metres of the building to comply with clause 3.2.5.5.(2) (b) of the ABC 2006, Division B.
18. The appellant's desire to construct the water supply during winter months while the ground is frozen is a reasonable request given seasonal conditions however in the interim occupancy safety must be addressed by way of a fire safety watch.
19. The construction required to provide water supply for firefighting in compliance with the ABC 2006 is not complete and the building is occupied. The Appellant is required to provide, as an interim safety measure, a fire watch in accordance with a fire safety plan approved by the Authority Having Jurisdiction, until the water supply for firefighting is provided and the Respondent has approved the installation following site inspection. Occupancy safety is the responsibility of the owner.
20. With regards to the Appellant's position that their building is the only equestrian centre in municipality required to provide water supply for firefighting, this Appeal Panel's jurisdiction is to hear and decide on the matter before it, an appeal of the Respondent's order issued to the Appellant dated June 3, 2013.

Dated at Edmonton, Alberta this 8th day of November 2013

Chair, Building Technical Council Appeal Panel