



- [REDACTED]
3. The Coordinator of Appeals then introduced the Chair of the Tribunal (the “Chair”), [REDACTED], and turned the hearing over to them.
  4. The Chair called the hearing to order and introduced the other Tribunal members: [REDACTED]
  5. The Appellant and Respondent confirmed there were no objections to any members of the Tribunal, and that the Safety Codes Council in general and the Tribunal in particular had jurisdiction to hear and decide the appeal. The Tribunal also confirmed they had jurisdiction to hear and decide this appeal.
  6. The Chair then explained the process of the hearing, and advised of the list of the written material before the Tribunal, consisting of the documents listed below in **The Record** (see paragraph 8). The Appellant and Respondent confirmed that there were no objections to any of the material submitted to the Tribunal.
  7. During the hearing, a question arose from one of the witnesses regarding the professional conduct of engineers involved in this matter. The Coordinator of Appeals advised that the Safety Codes Council has a Memorandum of Understanding in place with the Association of Professional Engineers and Geoscientists of Alberta (“APEGA”). Through this, there is notification from Safety Codes Council to APEGA, following publication of the Tribunal’s decision, where the practice of engineering or geoscience may be involved in the determination of issues on a Council appeal. APEGA may then commence an investigation regarding professional conduct, if required.

**The Record:**

8. The Tribunal considered, or had available for reference, the following documentation:

<u>Item</u>	<u>Description</u>	<u>Date</u>
i.	Notice of Appeal	November 28, 2022
ii.	Council’s Acknowledgment Letter	November 28, 2022
iii.	Council’s Notification of Hearing Letter	December 6, 2022
iv.	<b>EXHIBIT 1 APPELLANT</b> – Appellant’s Appeal Brief	-
v.	<b>EXHIBIT 1 RESPONDENT</b> – Respondent’s Appeal Brief	-

**Issue:**

9. This appeal concerns the issuance of the Refusal with respect to the occupancy classification of the Subject Property under the National Building Code 2019 – Alberta Edition (the “Building Code”).

**Positions of the Parties:**

Appellant

*From the Appellant’s submissions and testimony, the Appellant’s position is summarized as follows:*

10. The Refusal should be revoked and the permit directed to be issued as the Subject Property is a Group F, Division 2 medium-hazard industrial occupancy (“F2”) and the Subject Property complies with the Building Code requirements of that occupancy classification.

Respondent

*From the Respondent’s submissions and testimony, the Respondent’s position is summarized as follows:*

11. The Refusal should be confirmed as the Subject Property is a Group F, Division 1 high-hazard industrial occupancy (“F1”) and does not comply with the Building Code requirements of that occupancy classification.

**Summary of the Evidence Provided On Behalf of the Appellant:**

Evidence on behalf of [REDACTED]

12. [REDACTED] was engaged by [REDACTED] as a general contractor for the Subject Property.
13. For the proposed use of the Subject Property, an F2 occupancy is suitable and F1 is not required, as evidenced in Exhibit 1 Appellant.
14. Requiring the Subject Property to be an F1 occupancy would be precedent setting for similar companies and, given their rarity and complexity, make it difficult for businesses to open in the [REDACTED] area.

Evidence on behalf of [REDACTED]

15. [REDACTED] completed the mechanical design for the Subject Property comprising of ventilation for the tinting room and storage warehouse.

Evidence on behalf of [REDACTED]

16. [REDACTED] is a Professional Engineer, Safety Codes Consultant, and Safety Codes Officer. He was contracted for Building Code consultation on the Subject Property and prepared the Code Review Report dated August 23, 2022 (the “[REDACTED] Code Review Report”) (Pages 66 – 72 of **The Record, Exhibit 1 Appellant**).

17. In the [REDACTED] Code Review Report, [REDACTED] classified the Subject Property as an F2 occupancy; however, this has been refused by the Respondent as it is their opinion the occupancy contains sufficient quantities of highly flammable and combustible liquids and have interpreted this as 'bulk storage warehouse for hazardous substances' under Division B, A-3.1.2.1.(1) of the Building Code; these reasons are not supported by the Building Code.
18. On the issue of bulk storage, it is not a defined term in the Building Code; therefore, it requires use of the generally accepted definition for the term which is: storage in a warehouse of supplies and equipment in large quantities, usually in original containers, as distinguished from bin storage.
19. Recommendations in the Material Safety Data Sheets (the "MSDS") (**The Record, Exhibit 1 Appellant**) provide a good starting point to decide where and how hazardous product should be stored. Workplace factors then need to be considered, such as amounts in storage, types of containment, and product use.
20. WHMIS provides guidance that bulk or smaller containers are types of containment and bulk storage can be likened to drums and tanks (Page 133 of **The Record, Exhibit 1 Appellant**). [REDACTED] opined that the five gallon small containers [REDACTED] product would be stored in should not be considered as bulk storage.
21. On the issue of sufficient quantity, this too is not defined in the Building Code and neither the Respondent nor industry has set a standard on the specific number they want to enforce to require F1 classification. Consistency and determination on sufficient quantity is desired for the ability to enforce the Building Code on this issue.
22. Building classification is the main function of a Plans Examiner and the Building Code provides guidance in Division B, A-3.1.2.1.(1), where three occupancies relate to paint: bulk plants for flammable liquids, paint, varnish, and pyroxylin product factories, and spray painting operations. [REDACTED] occupancy does not fit into these categories, as there is less hazard with solely storage versus operations where combustible particles are in the air, such as factories or spray paint operations.
23. With respect to the tinting room at the Subject Property, there is no difference in the hazard compared to the storage room, as it can be equated to an office area as part of a warehouse or like the Home Depot paint mixing section. With such small quantities and machines being used for the mixing, there are no combustible particles in the air, in contrast to what occurs at a more hazardous spray painting operation.
24. The Respondent is not being objective or fair in their interpretation and enforcement of the Building Code.
25. The Subject Property does not warrant F1 occupancy classification and the permit should be accepted as F2.

Evidence on behalf of [REDACTED] :

26. [REDACTED] is an Engineer with [REDACTED] and was contracted by the Appellants to review the [REDACTED] Code Review Report, as well as conduct a Fire Hazard Assessment (the "FHA") (Pages 76 – 114 of **The Record, Exhibit 1 Appellant**). They have experience with these types of

facilities and the paint industry.

27. The purpose of the FHA was to establish that the design of the Subject Property is suitable for hazards that may take place within it. Accordingly, they looked at building structure, materials stored, manner of use, and means of evacuation to formulate a worst case fire hazard scenario and examine whether the protection measures in place could mitigate the hazard.
28. With the Subject Property, there are passive protections in place, such as lots of compartmentalization within the building structure, beyond what is required by National Fire Code 2019 – Alberta Edition (the “Fire Code”), with two-hour separations throughout. The storage room is large with a limited quantity of storage (Page 2 and 35 of **The Record, Exhibit 1 Appellant**) so there is low density of storage given the area. For the tinting room, [REDACTED] likened it to what you would see in a Home Depot and advised there was no dispensing and gentle stirring with maximum five gallon containers. In addition, there are active protection measures with a sprinkler suppression system, ventilation, and operational safety procedures in place.
29. For the FHA, the intent was to examine the worst case fire scenario that could occur (Page 92 of **The Record, Exhibit 1 Appellant**). It was determined that given the very small quantities, two five-gallon containers, relative to the area of the tinting room, there would not be a substantial impact if a fire occurred in that room. The higher hazard was determined for the storage room and so the FHA was based on this area.
30. The FHA focuses on the survivability of the fire separations and building structure as well as ability of occupants to evacuate. Here the sprinkler suppression would help control any potential fire and there is adequate time to evacuate given the low occupant load. The capabilities of the Fire Department were also taken into account in that there are adequate fire resources to respond to a fire given this is within a municipality.
31. The Subject Property design is sufficiently adequate as-is and so the difference in classification between F1 and F2 has no bearing. Adequate performance involves the capability to exit safely, ability to contain the fire sufficiently with suppression systems, have fire separations and structure stay intact for the duration of the fire, and prevent spread to neighbouring tenants.
32. The Respondent focused on the MSDS and the materials posing a higher hazard; however, given there was no incompatibility of storage of the materials this did not impact the FHA (Page 115 of **The Record, Exhibit 1 Appellant**).
33. On the issue of sufficient or great quantities, the Fire Code warrants up to 60,000 litres of class 1B and 1C flammable liquids in a single compartment and here there is a proposed one-third of that being stored. That, combined with the large building area of the Subject Property, demonstrates this is a much lower density operation. The Fire Code also does not mandate many other measures, such as ventilation, for places with closed containers, as there is limited hazard with a liquid that is confined to a container compared to where there is opening and dispensing of liquid.
34. An F1 classification should not be a quantity issue but rather an examination on the inherent hazards in the operation and here there are closed containers with fire separations and sprinkler protection in place.
35. Explosion risk was considered but it was determined not likely given the lack of open or dispensed liquid in the storage room. For an explosion to occur, flammable vapours must be present in the

atmosphere. Even in a scenario where the containers on a pallet are dropped and a spill results, it is not likely to reach a hazardous concentration of vapours given the size of the storage room.

36. In the tinting room there are limited quantities, with two containers maximum being brought in and opened. In addition, there is safety ventilation and electrically classified equipment present as a control measure, along with a probable first response action. This also would not create an explosion risk and so the tinting room is not a main hazard in this building given its use.
37. An analysis on the explosive atmosphere in the tinting room could be completed.
38. The FHA's scope was not for a code analysis in line with an alternate solution or to evaluate different risks, but rather providing secondary confirmation that the building design mitigates the fire hazards present. The FHA was not given proper consideration by the Respondent.
39. The Subject Property complies with the requirements of the Building Code and Fire Code as-is.
40. The Appellants took great steps to obtain the FHA to support the permit application and [REDACTED] commented on the lack of opportunity for proper peer review among the involved engineers.

Evidence on behalf of [REDACTED]

41. [REDACTED] is the [REDACTED] and oversees its distribution centres. [REDACTED] was looking to expand operations and accordingly sought to open a location in [REDACTED], Alberta.
42. [REDACTED] takes safety as a priority.
43. The consequences of the Refusal have been a delay on the project of approximately six to eight months, along with financial impacts.
44. Not all products listed in the inventory list would be used or opened as part of the tinting process.

**Summary of the Evidence Provided On Behalf of the Respondent:**

Evidence on behalf of [REDACTED]:

45. [REDACTED] is a Safety Codes Officer and Plans Examiner with [REDACTED]. He is also a Professional Engineer registered with APEGA. He has over 16 years experience with the building discipline.
46. His role with respect to this permit application for the Subject Property was to review compliance of the design and specifications submitted for compliance with the Building Code and applicable standards. There was consultation with the [REDACTED] Fire Department and senior building approval colleagues.
47. The original permit application included drawings indicating an F1 major occupancy classification (Pages 6 – 13 of **The Record, Exhibit 1 Appellant**), a Request for Specific Variance (Page 14 of **The Record, Exhibit 1 Appellant**), and a Code Assessment Report [REDACTED] (Pages 15 - 28 of **The Record, Exhibit 1 Appellant**); these were abandoned in the permitting process.

48. The Appellants then submitted revised drawings indicating an F2 occupancy classification (Pages 58 – 65 of **The Record, Exhibit 1 Appellant**) and the [REDACTED] Code Review Report to support the permit application and are the basis of the Refusal.
49. [REDACTED] questioned whether the original Architect engaged for this project would have endorsed the change in the permit application from F1 to F2 classification; sufficient rationale has not been provided by the Appellant's with respect to this change.
50. The examples listed under Division C, A-3.1.2.1. are not an exhaustive list, but do provide guidance. Here, [REDACTED] identified themselves as a coating, lining and fireproofing supplier, with the main product being industrial paint that has advanced chemical properties according to the MSDS. The intended use of the Subject Property is for bulk storage prior to distribution of this product, in accordance with the definition of the term in industry standards and the Oxford English dictionary.
51. The MSDS are reviewed to determine classification of the liquids. Here, there are highly flammable liquids, some made up of twelve chemical ingredients with vapours heavier than air that could spread along the floor and could ignite at ambient or surrounding air temperatures. Therefore, there is an explosion risk like that at a spray painting operation.
52. [REDACTED] highlighted the MSDS for Urethane Converter 811, 8800, and 8843 as examples of product instability and water reactivity.
53. In addition to the MSDS, [REDACTED] consulted the NFPA Standards 68 98, 101 and 704, to further match the category of flammability hazard to the level of danger for each product.
54. In the tinting room, dispensing of these liquids would be taking place; therefore, the tint room has to be classified as F1 occupancy as the risk is more hazardous given the product will no longer be contained once in this room. In accordance with Division B, Article 3.2.2.6. of the Building Code, the requirements for the most restricted major occupancy shall apply to the whole building. The exceptions in Articles 3.2.2.7 and 3.2.2.8. do not apply.
55. There is not only dispensing of the liquids, but also reservoirs that may contain leftover paint to feed the mixing machines. This would increase the quantities of open and hazardous product in the tint room.
56. The tinting room operations were differentiated from that of a Home Depot or Lowes given those operations involve water-based paints for largely residential purposes and [REDACTED] products are industrial coatings classified as highly flammable liquids.
57. [REDACTED] acknowledged the ventilation present in the tinting room as a means to reduce the special fire hazard but emphasized the vapour hazard which is not eliminated by ventilation.
58. The intent of occupancy classification is to match the use of the building, including potential hazards, with its occupancy to address life safety objectives of the Building Code.
59. The FHA was not the reason for the Refusal, but was requested at the discretion of the authority having jurisdiction to gather further information to support the permit application.
60. The use and occupancy of the Subject Property belongs to an F1 classification, as it is a bulk storage warehouse for hazardous substances and features a tint room where these hazardous substances are opened and dispensed.

61. The Refusal was issued when communications with the Appellants stalled with no resolution.
62. The Respondent welcomes new businesses and ventures to the city but the need to ensure public safety is paramount and the minimum requirements of the Building Code must be met.

Evidence on behalf of [REDACTED]

63. [REDACTED] is a Professional Engineer registered with APEGA since 2012 and a certified Fire Safety Codes Officer since 2019.
64. There is sufficient quantity of flammable liquids here as demonstrated in [REDACTED] inventory levels (Pages 42 – 45 of **The Record, Exhibit 1 Appellant**).
65. The tinting room operations were differentiated from that of Home Depot as the reactivity of the paints is different, specifically there are some chemicals that are reactive with water and so a sprinkler is not acceptable fire protection as water cannot be used to extinguish these materials. A powder or foam may be more appropriate in accordance with Division B, Article 3.3.5.2.
66. If there is a fire in the tinting room, there is a risk it could cascade to the storage warehouse and additionally a toxic environment will be created given the chemical composition of some of the products. This creates risk to those attending the site, such as the Fire Department.
67. It was acknowledged there are active and passive fire protections in place; however, the risk related to the flammability, toxicity, and reactivity of the products has not been sufficiently addressed.
68. There is a risk and that risk needs to be managed to the satisfaction of the Respondent for life safety and public protection.
69. Whether or not certain products will be used in the tinting room, the main concern is an escalation of a fire or explosion to the warehouse where the majority of the product is stored.
70. The Respondent's judgement during the permitting process was that the FHA was not sufficient in addressing occupancy classification and the decision was based on the flammability, toxicity, and reactivity of the product to be stored and dispensed within the Subject Property.

**Technical Advisor – Questions & Answers:**

71. [REDACTED] was the Technical Advisor with Alberta Municipal Affairs present for the hearing. The role of the Technical Advisor is to clarify questions of the Tribunal regarding the interpretation of the relevant codes and any related code issues.
72. The Tribunal deliberated on the questions for the Technical Advisor in camera during a lunch recess. All parties including the Technical Advisors and observers reconvened in the virtual hearing room and the Chair posed the Tribunal's questions to the Technical Advisor and received the following responses:
  73. *Q: What is a special fire hazard under the Building Code?*  
A: There is no defined term for a special fire hazard.



**74. Q: Does the Building Code define bulk storage?**

A: No it does not. 'Bulk storage' is not used in the body of the Code, only mentioned within the notes.

**75. Q: Does the Building Code define dispensing?**

A: No it does not. Any time there is a word or phrase in the body of the Code that is not a defined term as per Division A, 1.4.1.2., the most common definition used by industry and professionals is used and failing that, refer to the Canadian Oxford Dictionary.

**Findings of Fact:**

*The Tribunal makes the following findings:*

- 76.** A permit in the building discipline was applied for by the Appellants for the Subject Property based on an F2 occupancy classification.
- 77.** The Subject Property includes both a storage room where closed containers of [REDACTED] product are stored and a tinting room where product would be opened.
- 78.** According to the inventory sheets (Pages 42 – 46 of **The Record, Exhibit 1 Appellant**), there is product, such as Urethane Converters 811, 8800, and 8843, which in accordance with the MSDS are flammable liquids.
- 79.** The FHA is a comprehensive analysis of fire hazard in the storage area; however, it does not address the concern of a potential special fire hazard, including flammability and explosion risk given there is a quantity of open product in at the Subject Property at any given time.
- 80.** A permit for the proposed occupancy classification cannot be issued as the Appellants have not submitted information that adequately supports an F2 occupancy for the entire Subject Property.
- 81.** The tinting room at present features two-hour fire separation, ventilation, and sprinkler protection, which would not comply with the prescriptive requirements of an F1 occupancy suggested by the Respondents.

**Reasons for Decision:**

- 82.** On an appeal such as this, the powers of the Tribunal are set out in subsection 52(2) of the *Act*, the relevant excerpt is reproduced below:

52(2) The Council may by order

- (b) confirm a refusal or direct that a designation, certificate or permit be issued and direct inclusion of terms and conditions in the designation, certificate or permit.

- 83.** The Refusal was issued pursuant to subsections 44(3) of the *Act* and Division C, Article 2.2.10.8.:

44(3) If a safety codes officer or other person designated by an Administrator refuses to issue a permit, the safety codes officer or other person designated by an Administrator shall serve the applicant with a written notice of the refusal.

2.2.10.8. 2) The authority having jurisdiction may refuse to allow any building, project, work or

