

## Woodley, Catherine OHCS:EX

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**From:** May, Zachary OHCS:EX  
**Sent:** Wednesday, August 2, 2017 1:19 PM  
**To:** Woodley, Catherine OHCS:EX  
**Subject:** RE: New FOI Request: HOU-2017-72467 (Grenfell Tower Cladding): Pls respond by August 8 - Call for Records  
**Attachments:** KM\_HSG\_New Fire Sprinkler Requirements\_Grenfellfire\_June2017.docx  
**Categories:** Red Category

Hi Catherine,

I have the following record, including the attachment that was send to the DM regarding the Grenfell Tower.

Best,  
**Zachary D. May, MBA**  
A/Director, Policy and Codes Development

Building and Safety Standards Branch : Ministry of Municipal Affairs and Housing  
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**From:** Steves, Gregory OHCS:EX  
**Sent:** June 16, 2017 2:20 PM  
**To:** Nikolejsin, Dave MNGD:EX  
**Cc:** Ramsay, Launa P OHCS:EX; Tiffin, Kim OHCS:EX; May, Zachary OHCS:EX  
**Subject:** FW: Grenfell Tower London

Dave,

Attached is a high level summary of what we know right now about the Grenfell Tower Fire. Further inquiries are being made, and analysis done, on the foam plastic insulation and metal siding that caused the fire to spread so quickly. I expect to have that analysis next week. Also attached are the KM's prepared with GCPE.

**Key point:**

- The Grenfell Tower fire in London was likely the result of unsafe building design and inadequate maintenance of fire safety systems. A similar event in British Columbia is extremely unlikely.

**Background:**

- Fire originated on the 4<sup>th</sup> storey of a 26 storey apartment building due to a malfunctioning refrigerator.
- Reports suggest that fire alarms did not function at the time of the fire, and residents began knocking on doors to alert other residents.
- The building was not sprinklered.
- Reports also suggest that the building only had one exit stairway.
- Fire spread to the exterior of the building and continued to be fueled by foam-plastic insulation behind metal siding.
- Fire crews were unable to extinguish the fire because it was protected by the metal siding, and the fire quickly engulfed the entire building.

**Safety measures in the BC Building and Fire Codes:**

- **New residential buildings over 4 storeys have required sprinklers since at least the 1998 BC Building Code.**
- **Fire alarms and a requirement for at least 2 exits from a building have been requirements for large residential buildings for at least 50 years.**
- **The BC Fire Code requires regular testing of all safety systems and a fire safety plan required to be updated annually.**
- **In a similar situation in BC, all occupants would have been alerted to the fire and have been provided with at least two means of exiting the building. The additional exit also provides fire services with increased access to the building.**
- **Potential risks related to siding and insulation require more analysis.**

## **FIRE SPRINKLER REQUIREMENTS**

Topic: A fire in a London highrise has residents asking for legislation requiring that Britain's aging public high-rises be retrofitted with sprinkler systems and multiple stairwells, lacking in many older buildings.

- B.C.'s Building Code has stringent fire safety requirements for new buildings.
- For the past 18 years, sprinklers have been mandatory in B.C. in all new residential buildings over four storeys, all high-rise buildings over six storeys and all care facilities. These buildings are also required to provide access to at least 2 exits from the building.
- Due to the prohibitive cost of adapting older buildings to higher standards, the BC Building Code does not apply retroactively to require owners to upgrade existing buildings. However, existing buildings are required to maintain and test their fire alarm systems, and have a fire safety plan updated at least every 12 months.
- We are updating the BC Building Code to require fire sprinklers to be installed on the balconies of all new four storey wood-frame residential buildings.
- The new requirements will take effect on July 20th. The Province is providing a transition period to allow time for the industry to adapt to the new requirement.

- Where a building owner chooses to undertake work to an existing building that affects its fire and life safety systems, some upgrading of those systems may be required.

**Background:**

Generally, under the 2012 BC Building Code, the following requirements are in place:

**Residential Buildings:**

- Three storeys and under - sprinklers are not required (e.g. houses, townhomes, low-rise residences)
- Four storeys and higher - sprinklers are required, but not on balconies (e.g. apartment buildings, condominiums)
- Five storeys and higher - sprinklers are required, small balconies generally excluded (e.g. apartment buildings, condominiums)

**Office Buildings:**

- Sprinklers required if more than six storeys (small balconies generally excluded)

**Care Facilities:**

- Sprinklers required in all cases (small balconies generally excluded)

The BC Building Codes are based on the model National Building Codes. New editions of the National Code are released every five years and subsequently adopted by B.C. approximately two years later.