#### Submit a comment

## Proposed Change 1918

Code Reference(s):	NBC20 Div.B 2.1.1.1. (first printing)
Subject:	Large Farm Buildings (General)
Title:	Introduction of the OP3 Sub-Objective for Farm Buildings in the NBC
Description:	This proposed change facilitates the introduction of the spatial separation sub-objective (OP3) in Part 2 of Division B of the NBC by revising Note A-2.1.1.1.(1).
Related Proposed Change(s):	PCF 1777, PCF 1919, PCF 1935, PCF 1936

This change could potentially affect the following topic areas:

Division A	$\checkmark$	Division B
Division C		Design and Construction
Building operations		Housing
Small Buildings	$\checkmark$	Large Buildings
Fire Protection		Occupant safety in use
Accessibility		Structural Requirements
Building Envelope		Energy Efficiency
Heating, Ventilating and Air		Plumbing
Conditioning		Construction and Demolition Sites
	Division C Building operations Small Buildings Fire Protection Accessibility Building Envelope Heating, Ventilating and Air	Division C   Building operations   Small Buildings   Fire Protection   Accessibility   Building Envelope   Heating, Ventilating and Air

## Problem

In the 2015-2020 Code cycle, new technical requirements for large farm buildings were developed for publication in the 2020 editions of the National Building Code of Canada (NBC) and the National Fire Code of Canada (NFC). The new requirements were intended to address the Codes' life safety (OS) objectives, following the initial direction provided by the Canadian Commission on Building and Fire Codes (CCBFC).

In the course of this work, the CCBFC was consulted on whether spatial separation requirements should also be considered for farm buildings. In September 2019, the Executive Committee (EC) of the CCBFC, after consulting with the provinces and territories, requested that the Joint Task Group drafting the provisions "follow the normal Code development process when developing requirements for spatial separation."

Due to time limitations, spatial separation requirements for farm buildings were not included in the 2020 editions of the NBC and NFC, nor were OP objectives or intent statements. As such, there is a need to continue this work, which was deferred from the 2015-2020 Code cycle with the intention that these requirements and objectives would be included in the 2025 editions of these Codes.

For the 2020-2025 Code cycle, the Province of Ontario led the work to develop spatial separation requirements for large farm buildings in the NBC. Codes Canada expanded the application of the OP3 sub-objective to existing requirements in the NBC and introduced relevant intent statements where appropriate, as directed by the EC.

However, existing explanatory Note A-2.1.1.1.(1) of Division B of the NBC could create confusion for Code users if it is interpreted to mean that only the safety of persons is considered in the development of requirements for large farm buildings, and that no consideration is given to the OP3 sub-objective. This interpretation is in conflict with the direction provided by the EC in September 2019 and with the introduction of spatial separation requirements for large farm buildings in the NBC. The different possible interpretations may also cause disagreements between consultants, owners, builders and regulators, which could cause unnecessary delays in practice. As such, the explanatory Note suggesting this more limited intent of the farm building requirements in Part 2 of the NBC should be revised to clarify the application of objectives (and sub-objectives) to farm buildings.

## **Justification**

Explanatory Note A-2.1.1.1.(1) could be interpreted to mean that only OS objectives are addressed in Part 2 of Division B of the NBC. Some Code users may conclude that the OP3 sub-objective is not considered at all, since the Note references the safety of persons in farm buildings exclusively.

To mitigate the risk of misinterpretation and avoid potential confusion, explanatory Note A-2.1.1.1.(1) should be revised. Because some provisions relate to life safety by requiring fire-resistance ratings or a minimum distance between two buildings, the corresponding Sentence 2.1.1.1.(1) of Division B would be left unchanged.

This proposed change would allow the OP3 sub-objective and related technical requirements to be considered for farm buildings without contradiction. It also aligns with the direction provided by the CCBFC in the previous Code cycle and would permit technical requirements related to property and exposure protection (such as spatial separation requirements) to be considered for farm buildings in Part 2.

## **EXISTING PROVISION**

#### 2.1.1.1. Scope

**1)** This Part is concerned with the fire, structural, heating, ventilating and air-conditioning performance of *farm buildings*, as well as processes and

operations carried out therein that involve a risk of explosion, high flammability or related conditions that create a hazard to life safety. (See Note A-2.1.1.1.(1).)

#### Note A-2.1.1.1.(1) Safety of Persons.

The intent of Part 2 is to set forth measures to ensure the safety of persons in farm buildings.

## **PROPOSED CHANGE**

#### [2.1.1.1.] 2.1.1.1. Scope

#### Note A-2.1.1.1.(1) Safety of Persons.

The intent of Part 2 is to set forth measures to ensure the safety of persons in farm buildings and the safety of persons in buildings adjacent to farm buildings by means of spatial separation.

## Impact analysis

No new costs would be introduced by permitting the OP3 sub-objective to be considered for farm buildings. The proposed change would not introduce any new technical requirements but would rather allow the OP3 sub-objective to be considered for farm buildings in the NBC.

It should be noted that the future development of technical requirements related to the OP3 sub-objective may impact farm building use and construction costs. However, these requirements would be subject to separate evaluation and consideration at the time that they are developed, with impact analyses that are specific to the proposed technical requirements in question.

## **Enforcement implications**

Allowing objectives other than life safety to be considered for large farm buildings does not on its own introduce any technical requirements that would need to be enforced by authorities having jurisdiction (AHJs), but AHJs should be aware of the change that permits the OP3 sub-objective to be considered.

This proposed change would reduce the risk of confusion for Code users and help facilitate the enforcement of the Code provisions.

Affected persons would include AHJs, architects, engineers, contractors and building owners, as they should be made aware that OS objectives are not the only objectives relevant to farm building requirements and that the OP3 sub-objective also applies to farm buildings.

# OBJECTIVE-BASED ANALYSIS OF NEW OR CHANGED PROVISIONS

[2.1.1.1.] 2.1.1.1. ([1] 1) no attributions