Government of
Northwest Territories

NOTICE TO CONTRACTORS

CLARIFICATION OF RULES ON PROPANE CYLINDERS, PROPANE TANKS AND ARCPRODUCING ELECTRICAL EQUIPMENT

Canadian Electrical Code 2-328 Electrical equipment near combustible gas equipment (see Appendix B)

The clearance distance between arc-producing electrical equipment and a combustible gas relief device or vent shall be in accordance with the requirements of CSA B149.1 and CSA B149.2.

Some examples of arc-producing electrical equipment are air conditioners, switches, receptacles, relays, SMART meters, meter base mounted transfer devices such as Generlink.

Normal location light fixtures located above relief devices or vents are not considered to be arc producing if they have a cover to protect the bulb or if they are LEDs.

Appendix B note to Rule 2-328

The clearance distances specified in B149.1 between a source of ignition and a combustible gas relief discharge device or vent are as follows:

(a) 1 m for natural gas; and

(b) 3 m for propane gas.

CSA B149.1 definition of a relief device:

CSA B149.1 - Relief device — *a device designed to open to prevent a rise of gas pressure in excess of a specified value due to an emergency or abnormal conditions.*

The above definition refers to pressure relief on the tank. Every tank has one. It is designed for emergency relief only so under normal operating circumstances it will not relieve pressure.

A vent refers to the vent you see on the regulator set. If it happens to be within hazardous area, it may be piped to a point outside the hazardous area.

Distance to above ground tanks to source of ignition

B149.2 Table 7.4, Location of above-ground tanks for consumer locations (See Clauses 7.10.2, 7.10.3, and 9.3.2 and Annex M.)

Total aggregate water capacity, USWG (L)	Minimum distance, ft (m), between tank and property line; adjacent concrete or masonry building wall with no building openings within the specified clearances; or source of ignition*	Minimum distance, ft (m), between tank and building wall of other than concrete or masonry construction	Minimum distance, ft (m), between tank and building opening	Minimum distance, ft (m), between tank and adjacent tank†
Up to and including 125 (475)	None‡	None	3 (0.9)	None
Over 125 (475) up to and including 1000 (3800)	10 (3)	10 (3)	10 (3)	3 (0.9)
Over 1000 (3800) up to and including 2000 (7800)	10 (3)	25 (7.6)	25 (7.6)	3 (0.9)
Over 2000 (7800) up to and including 5000 (19 000)	15 (5)	25 (7.6)	25 (7.6)	3 (0.9)
Over 5000 (19 000) up to and including 10 000 (38 000)	25 (7.6)	25 (7.6)	25 (7.6)	3 (0.9)
Over 10 000 (38 000) up to and including 30 000 (113 500)	50 (15.2)	50 (15.2)	50 (15.2)	5 (1.5)
Over 30 000 (113 500)	§	§	§	§

***** *Distances to property lines may be amended by the authority having jurisdiction.*

† *If tanks of a multiple tank installation are installed on a common concrete/steel base or pier, the clearances may be reduced to a ¼ of the sum of diameters of the adjacent container.*

‡ *10 ft (3 m) from any source of ignition.*

§ *At the discretion of the authority having jurisdiction.*