

Incident Summary #II-1617609-2023 (#41638) (FINAL)

SUPPORTING INFORMATION	Incident Date	November 19, 2023	
	Location	Langford	
	Regulated industry sector	Gas - Natural gas system	
	Impact	Qty injuries	0
		Injury description	N/A
		Injury rating	None
	Damage	Damage description	Kitchen fire, damage to wall coverings and equipment.
		Damage rating	Moderate
	Incident rating	Moderate	
Incident overview	Ball valve located on fuel supply to a four-compartment deep fryer separated during movement of the appliance for cleaning. Uncontrolled release of gas found an ignition source resulting in a fire originating from the open gas line.		
INVESTIGATION CONCLUSIONS	Site, system and components	Four compartment deep fryer connected to a rigid gas supply using a flexible gas connector. Non-combustible restraints are required between the appliance and a suitable tie off point to prevent damage to the fuel supply during movement of the appliance.	
	Failure scenario(s)	<p>The deep fryer was equipped with wheels to allow unit to be withdrawn from the wall to permit cleaning under and behind the unit. The fryer bank was pulled away from the wall with sufficient force to create side loading on the gas shutoff valve resulting in mechanical failure/separation of the valve.</p> <p>The uncontrolled release of gas found an ignition source resulting in a fire.</p>	
	Facts and evidence	<p>The gas ball valve manufactures literature show that it is manufactured in two pieces. The main body which contains the handle and the ball and an end cap to contain the internal components and allow the insertion of piping. Post fire photo clearly shows the full separation of the shut off valve.</p> <p>Post fire examination found the cable restraints attached to the appliance only, with the tie off point located on the back wall unused.</p>	
	Causes and contributing factors	The incident was caused by the ineffective use of the appliance restraining device which allowed the appliance to move a distance that strained and broke the gas shutoff valve.	



Image 1 - Separation of two-piece ball valve.



Image 2 - Cable restraint located on rear of fryer bank.