Incident Summary (Reference# 638833)

SUPPORTING INFORMATION	Incident Date		*January 10, 2018*
	Location		*Vancouver*
	Regulated industry sector		*Natural gas system*
	Impact – Injury	Qty injuries	*None*
		Injury description	*None*
		Injury rating	*None*
	Impact – Damage	Damage description	*There glass on a fireplace was cracked and was completely shattered on a fireplace in a multifamily dwelling.*
		Damage rating	*Minor*
	Incident rating		*Moderate*
	Incident overview		*The glass on a fireplace cracked and was completely shattered on a fireplace. The fireplace was operating when an appliance regulator had failed open causing the fireplace glass to break and flame size to increase on the appliance.*
INVESTIGATION CONCLUSIONS	Site, system and components		*The fireplace is equipped with the following components and auxillary components. The appliance regulator turns on and off the appliance through a call from heat from a wall mounted on/off switch. The appliance regulator will only open if the wall switch is energized (call for fireplace to be on), and the pilot flame is verified through a thermopile (flame sensor). When all the above listed equipment is verified the natural gas flows through the appliance regulator and then is ignited by the pilot light which then lights all the gas flowing through the main burner. The products of combustion exit through the appliance venting and a stable flame is maintained as air is introduced to the appliance through a separate vent to the appliance for combustion air.*
	Failure scenario(s)		*The appliance regulator stops the flow of gas if the pilot flame is not sensed by the thermopile (flame sensor), or if there is no call for heat (off at wall mounted switch). The regulator overtime had failed in an open position not holding back the flow of gas which created an unsafe condition within the appliance. The appliance regulator was not limiting the gas flow which created the appliance to over fire and a surplus of gas was ignited causing the glass to break on the fireplace.*
	Facts and evidence		*-Glass found completely shattered on the fireplace.* *-Appliance regulator still allowing gas to flow without the pilot flame present and or a call for appliance to be in the on position. This was found by technician who responded to the incident.*
	Causes and contributing factors		*Likely the failure of the appliance regulator created an unsafe condition within the fireplace as was not able to turn off and hold back the gas flow. The failure of the appliance regulator then likely created an unsafe condition by allowing fuel to flow and not be held back as required by the appliance regulator. .The excess fuel likely caused the glass to be damaged and shatter.*

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Photos or diagrams (if necessary)