

Incident Summary (II-636367-2018)

| | Incident Date | | December 30, 2017 |
|---------------------------|---------------------------------|-----------------------|---|
| SUPPORTING INFORMATION | Location | | Kamloops |
| | Regulated industry sector | | Gas |
| | | Qty injuries | 1 |
| | :t Injury | Injury description | Carbon Monoxide Poisoning.1 person taken to hospital for further evaluation. |
| | Impact Damage | Injury rating | Minor |
| | | Damage description | None |
| | | Damage rating | None |
| | Incident rating | | Minor |
| | Incident overview | | During a recent cold snap the tenant in the downstairs suite had lit the fireplace appliance after it had been off for an extended period. After time this person felt ill and called the emergency services. |
| INVESTIGATION CONCLUSIONS | Site, system and components | | Natural draft vent would normally create a draft inside the chimney which would allow the products of combustion to vent outside. |
| | Failure scenario(s) | | Natural draft vented fireplace in basement suite back vented products of combustion into living area inside suite |
| | Facts and evidence | | Appliance was back venting into the basement suite. Technician found 140 PPM of carbon monoxide present in suite. The appliance vents into a 4" flexible liner inside a 6" stainless steel chimney The chimney base tee had the bottom cover removed. |
| | Causes and contributing factors | | The chimney is located on the outside of the house and is approximately 20 feet in height extending above the roof line of the house and is not enclosed. This would allow the four inch flexible liner to remain cold within the 6 inch chimney. At the bottom of the chimney the base tee is open which would allow cold air to travel down the outside of the flexible liner keeping it colder. Without the hot air able to rise up the chimney by way of a draft it is likely the products of combustion were forced to vent inside the home. |



Fireplace



Bottom section of vent and chimney base tee



Appliance nameplate



Top section of vent





4" flexible liner inside 6" chimney

