
Note – This report has been revised. The original version of this report referenced the incorrect incident date.

Incident Date: April 6, 2019
Location: Windermere, BC
Regulated industry sector: Electrical - Low voltage electrical system (30V to 750V)

<table>
<thead>
<tr>
<th>Injury</th>
<th>Qty injuries</th>
<th>Injury description</th>
<th>Injury rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>None.</td>
<td>Moderate</td>
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</table>

<table>
<thead>
<tr>
<th>Damage</th>
<th>Damage description</th>
<th>Damage rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Electrical unit heater destroyed by fire. Structure and property within damaged by fire.</td>
<td>Moderate</td>
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</table>

Incident rating: Moderate
Incident overview: A fire began in a detached garage in Windermere, BC. An electrical unit heater was found at the center of the fire damage.

Site, system and components: The unit heater was installed in the detached garage as the sole source of heat in the space. The purpose of the heater was to prevent fluids stored in the garage from freezing.

Failure scenario(s): The electric heater involved in the fire was determined to have been connected to a power supply at the time of the fire event. It was suspected that the heater may have malfunctioned.

Facts and evidence: The heater was installed by an electrical contractor in 2014.

Visual inspection of the site yielded the following findings:

The heater was located near the center of the fire damaged area in the garage. (see Figure 1). The most heavily fire damaged portion of the garage was the area above and around the unit heater.

The thermostat built in to the heater was set to a low setting. The heater was intended to cycle on around five degrees C, and off again around 8 degrees C. There were no other likely sources of ignition found near the fire damaged area.

The burnt frame of the unit heater very closely matched a recalled product’s listed dimensions. (see figures 2-4, and attached product recall sheet).

Upon further research into the heater, it was discovered that the recalled unit heater is known to have been involved in multiple structure fires across the country. The heating elements in the OCH-4800 unit heaters manufactured prior to 2016 were

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<th>Causes and contributing factors</th>
<th>known to be defective, and as such, have been subject to a product recall by the manufacturer.</th>
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Given the degree of damage to the unit heater, location of the heater near the center of the most fire damaged area and the lack of other plausible ignition sources nearby it is likely that the heater was the source of ignition for the fire. The dimensions of the heater closely matched a recalled regulated product known to be associated with increased fire risk, it is possible that the fire was caused by a failure of a faulty heating element within the heater.

Figure 1: Fire damage localized around heater installation location.
Figure 2: Unit heater depth

Figure 3: Unit heater height

Figure 4: Unit Heater width
Figure 5: Product catalog listing for recalled unit heater.