

Incident Summary #II-790702-2018 (#18758) (FINAL)

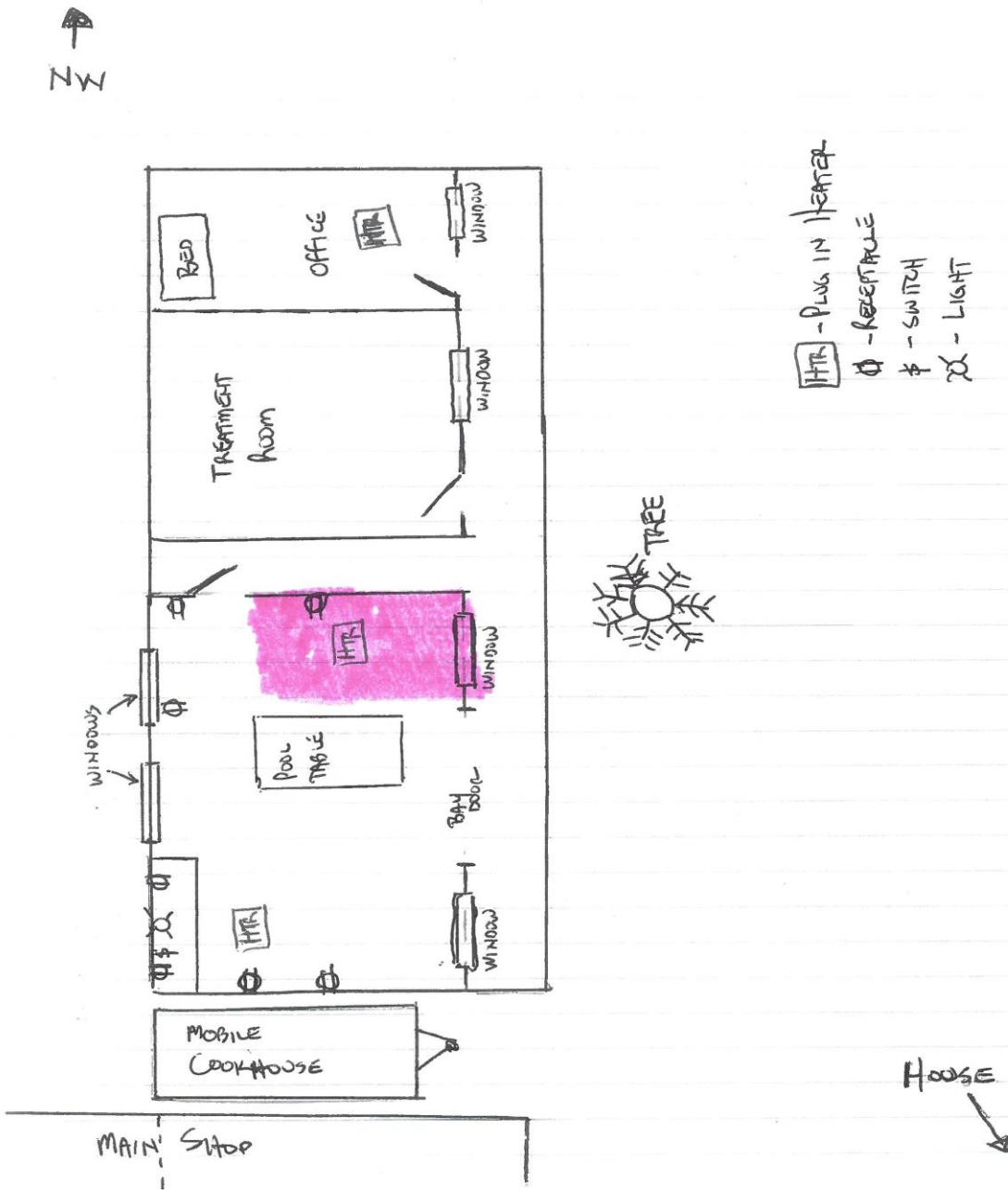
SUPPORTING INFORMATION	Incident Date	November 11, 2018	
	Location	Armstrong	
	Regulated industry sector	Electrical - Low voltage electrical system (30V to 750V)	
	Impact	Qty injuries	1
		Injury description	1 individual received laceration
		Injury rating	Minor
	Damage	Damage description	3 structures were destroyed by fire and substantially damaged building adjacent
		Damage rating	Major
Incident rating	Major		
Incident overview	A portable electric heater with a heat setting on high was plugged into a wall receptacle. The heater created a thermal build up at the wall receptacle resulting in a structure fire.		
INVESTIGATION CONCLUSIONS	Site, system and components	<p>A 900/1500watt 120volt electric portable Honeywell HZ-789 oil filled heater is used to provide supplemental or temporary heat in spaces but are not intended to be used as a permanent heating source.</p> <p>Control settings include: constant high 1500 watts- 'default'/ constant low 900 watts/ energy-smart mode- thermostat, plus an additional timer function is available when desired. "If nothing is selected, High Mode is defaulted"</p> <p>The heater unit itself has safety features built in that include 1- Tip over shut-off in case the unit fall over, 2- high temperature safety control and 3- high temperature cut-out for overheating that will permanently shut down heater</p>	
	Failure scenario(s)	<ul style="list-style-type: none"> - The Honeywell heater was located in the north end of the dining area - The owner entered the room to check the heater at approx. 2200 hours the prior evening- the heater was off, she re-started the heater but did not use available control settings, defaulting to high mode 	
	Facts and evidence	<ul style="list-style-type: none"> - Owner purchased 2x new Honeywell heaters from local hardware store, only 1 of these were in operation at time of incident. - The use of portable electric heater was used as one of the primary sources of heat in the dining area - Previous day, a separate individual installed heaters in the buildings and energized them, they had an issue with overcurrent devices tripping, they moved heaters around until they were operational without nuisance tripping - The Honeywell heater was the only electrical source operational in the northend corner of the dining area - Owner entered dining area at approx. 2200hours prior evening to check heaters, the Honeywell heater in question was 'off', she then turned it back 	

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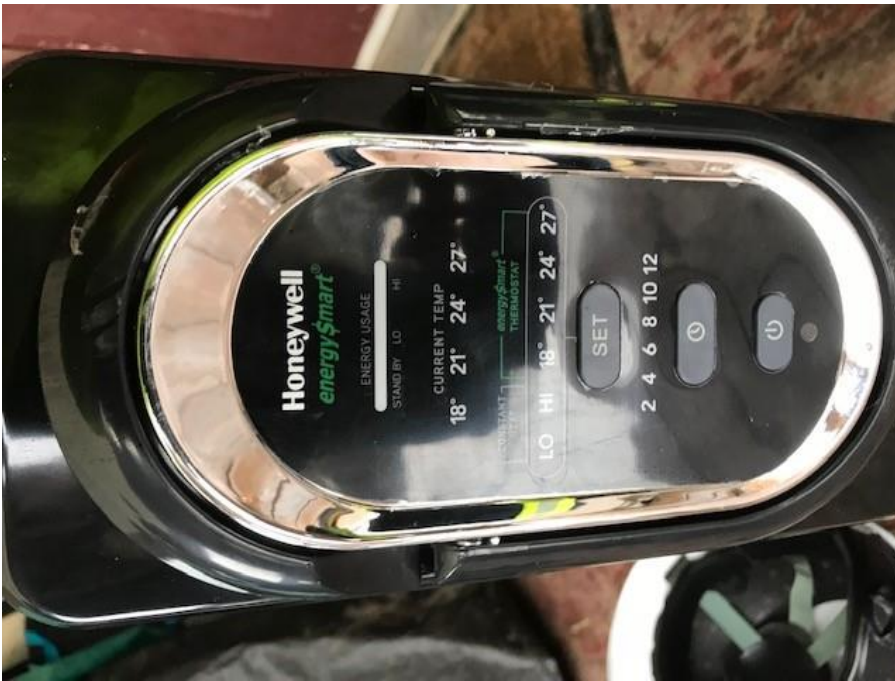
	<p>on without using any optional control settings leaving heater to operate at 'high mode' of 1500watts full time</p> <ul style="list-style-type: none"> - statement provided by individual occupying sleeping area in office was first to notice fire, she was awoken approx. 0500-0515 hours the morning of Nov 11. As she exited she noted the fire was located in the North end of the dining area where the heater was located and was not fully involved but it spread quickly to involve the complete dining area - Individual ran to wake everyone in the house and then ran back into the office to grab personal items, it was smoky entering room, individual tripped and hit head on bedframe causing injury - Honeywell documentation provides various warnings when operating the heaters and include the power cord being warm to the touch as being normal. - Investigating product online has provided other evidence found on other multiple occasions where it was found a small fire occurred at the point where the heater cord is plugged into the wall outlet
<p>Causes and contributing factors</p>	<p>The incident and cause of this fire is based mainly on statements provided by witnesses along with prior photos of site provided as the state of the fire was destroyed beyond the ability to confirm any 'definite' certain cause. The heater location was found located in the vicinity of where the initial statement provided a visible location of the fire origin.</p> <p>It is 'likely' that given all the evidence that the fire was started at the location where the heater cord was plugged into the wall outlet and not the heater itself. The heater was operating at full power of 1500 watts for an extended period of time and created either a hot cord connection, possible poor receptacle connection or a combination of both which failed and ignited the cedar structure around the receptacle location</p>



Northend corner of dining area, destroyed heater remains laying on ground



Witness statement of fire location (shaded by witness) noted from floor plan diagram created shows area of Honeywell heater



Second heater owner purchased, same as unit in question



Heater nameplate



Back northwest corner of dining area



Back southwest corner of dining area



Front Northeast corner of dining area, approx. location of heater



Front south east side of dining area