Worth Knowing While You're Going…

CO from an ELECTRIC Heater????

Call received: CO detector activation in a townhouse – detector is reading 68 PPM.

A new electric heat pump was installed and turned on for the first time in the heat mode. There is no odor of dust burning or any other related odors. The occupant has evacuated and denies any CO related symptoms.

There are NO gas appliances in the entire square-block complex. There are no items within the residence or adjacent units capable of producing CO. Winds are light and variable, 62˚F, clear conditions. Three independent Fire Service CO meters are used for monitoring in the affected unit – they confirm the home CO detector's readings. ALL accessible void spaces are monitored including the attic, crawl space (no basement) attached garage (no car) and the same are monitored in the adjacent units. Readings in the adjacent units is 0 PPM and the outside air around the building and next to the intake is 0 PPM. The HVAC unit is turned off – the CO readings gradually decline. The HVAC unit is turned back on – the CO readings immediately increase.

What is going on here?!?!?

After much head scratching and discussion, the Technician/Installer theorized that the hydrocarbon-based lubricant used in the manufacturing process to make the coils may be the culprit. Theory: As the coils are heated, the hydrocarbon-based lubricant begins to off-gas, subsequently resulting in CO readings. The unit was run for 45 minutes, maintaining initial CO readings, progressively dropped into the teens, then single digits, then to 0 PPM. STBT contacted an engineer from a major U.S. HVAC distributor for his input and expertise… He's going to get back to us after contacting the parts manufacturer to determine what is commonly used in the manufacturing process…keep an eye out for the update!

HEATING COILS