The Exhaust Vent Was Never Suspected

An experienced crane operator was running an electrically powered gantry crane in a process building which was in the final stages of construction. Other than the occasional use of a propane-powered forklift, there were no fossil fuel burning pieces of equipment in the building.

It was in the late fall of the year and at the afternoon coffee break, the crane operator climbed down from his overhead cab and reported to the first aid attendant that for the past week he was feeling very drowsy and nauseous by late afternoon, but by late evening the feeling of illness would go away. On this particular day, the operator was feeling worse than usual. They discussed the possibility of carbon monoxide exposure, but both the crane operator and the foreman stated that, except for the forklift, there wasn’t any machinery in the building that would create the deadly gas. The forklift had not been in the building on that day.

Instead of going back to work, the operator returned to the bunkhouse to have a nap. Later that evening, the first aid man checked on the operator and could not wake him up. That night the crane operator was pronounced dead upon arrival at hospital.

The coroner’s examination found that death was caused by carbon monoxide poisoning. The investigation team could not find the source of the carbon monoxide until they noticed a sheet metal exhaust vent hidden from view by the maze of piping in the process building. The exhaust vent led away from a wall which separated the shop floor from a small office complex. Inside the office complex was a furnace room with an oil-fired furnace in it. The exhaust vent was found to be damaged where it exited from the wall into the process building. The carbon monoxide was escaping from the damaged exhaust vent into the process building. Only the crane operator was affected by the escaping carbon monoxide because his control booth was close to the ceiling and the carbon monoxide, being lighter than air, accumulated near the ceiling.

Carbon monoxide is a deadly gas. You can’t see it, smell it or taste it. Be aware of the symptoms of carbon monoxide poisoning and when in doubt, inform your supervisor of your concerns. Always check to see that your work area is well-ventilated. Keep fuel-burning equipment in good repair.