Safety News

Cell Phone Dangers: An Explosive Situation?

Can cell phones cause an explosion as you fuel your car? We look at what U.S. government agencies say - and some precautions to keep it from happening.

You're at a gas station filling up. So is the driver at the next pump. Suddenly you hear his cell phone ring. As gasoline fumes waft upward from the nozzle inserted in his vehicle, he reaches to answer the call. Do you:

a) *Ignore it.*
b) *Be concerned.*
c) *Dive for cover!*

OK, diving for cover may be a bit extreme, but there is real risk of an explosion, says the U.S. Navy Safety Center, an organization that knows a thing or two about explosive situations.

This became clear in a fascinating advisory issued by the Safety Center to a "deluge of questions concerning the validity of safety issues associated with fueling vehicles," many of which, says the Center, have to do with cell phones.

They're not the only ones concerned. The Web page of the U.S. General Services Administration (GSA), which oversees the use of thousands of official vehicles, tells their operators "DO NOT (their capitalization) use your cellular phones when at a gas station. Cellular use anywhere fuel is stored is hazardous."

The impetus behind all this is a spate of reports (some, but not all, confirmed) that sparks generated by the circuitry in cell phone switches and batteries can, in fact, touch off a fuel explosion. "In one incident, a driver suffered burns and his car was severely damaged when ... talking on his mobile phone near a gas pump. Electronic devices in gas stations are protected with explosive containment devices," GSA declares. "Cell phones are not."

Other sources, however, consider all this an urban legend of sorts. And simple observation shows no evidence of drivers detonating at gas stations around the nation, even though cell phone usage is pervasive.

So what's the truth? According to the Safety Center:

- Cell phones are not designed for use in an ignitable fumes atmosphere. In fact, some owner's manuals clearly say this.
- It is possible for a spark powerful enough to create an explosion to be generated. One way this can happen, says the Safety Center, is if the phone is dropped, the battery pops out, and something bridges its terminals, creating a short. Others have warned of defective circuitry inside the phone doing the same.
- The chances of all this coming together at the precise same moment is "distinctly remote." But even so, caution while fueling is advisable. Turn off your engine, don't re-enter your vehicle (a static spark might be created), don't use your phone, and above all, DON'T SMOKE!

Of course, that doesn't mean there are no dangers associated with cell phones. In fact, there are. We'll look at some in another *Advisor*.

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