



The Petrol Myth

by Jeff Goldman

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A persistent rumor, spread by email, warns that mobile phones can start fires if used at filling stations. What's the truth behind the myth?

According to an email that's been making the rounds since 1999, a man in Indonesia was severely burned when he answered his mobile phone while refueling his car. The email quotes a newspaper article stating that static electricity from the phone ignited the vapors around the pump nozzle, severely injuring him and damaging his vehicle.

It's a great story—but there's no evidence it ever happened.

Soon after the rumor began spreading, a National Public Radio reporter tracked down the journalist who had originally published the story. "It turned out that the reporter that wrote the article wrote it third-hand, and it was her first article," explains Bob Renkes, Executive Vice President at the Petroleum Equipment Institute (www.pei.org). "They never could find any actual report of an accident."

Still, the rumor keeps spreading. What's more, there is a grain of truth involved, but it doesn't have to do with mobile phones.

Evolution of a Rumor

As evidence to back up the story, the first email to spread about the petrol myth pointed out that filling stations post warnings not to use mobile phones while refueling, and that phone manufacturers also have such warnings in their manuals. It ended with the ominous advice, "Read your handbook!"

The fact is, stations and phone manufacturers do post those warnings, and for good reason. According to Nokia spokesman Keith Nowak, United Kingdom law requires that the manual for any battery-operated device, from flashlights to radios, include a warning stating that it shouldn't be used at petrol stations.

Since mobile phones fit the bill, most printed manuals include that warning by default. And the PEI's Renkes says that when gasoline companies saw the warnings in phone manuals, they simply followed suit and began posting the same warnings at their pumps.

Still, the rumor has expanded beyond the first email that circulated. In 2002, a new email appeared, stating that Shell Oil had issued a warning not to use phones at filling stations after three incidents in which mobile phones ignited petrol fumes. But according to Shell spokesperson Stephanie Johnson, no such incidents were reported, and no such warning ever came from Shell.

More recently, a third email was added to the mix, quoting Bob Renkes himself. It says that Renkes is working to spread awareness of the dangers of static electricity at filling stations,

and lists a series of eight warnings related to the issue. In that list, warning number five reads, "Don't ever use cell phones when pumping gas."

The early emails about the petrol myth seem to have been entirely false, but the most recent one is different. "It's 80 percent right, 20 percent wrong," Renkes said. "That 20 percent wrong is point number five."

The Real Campaign

The 80 percent that's right comes from the Stop Static campaign (www.pei.org/static), a joint project which was started by the PEI and the American Petroleum Institute (www.api.org) in response to a series of actual incidents (www.pei.org/static/fire_reports.htm) in which static electricity (not from mobile phones) ignited fires at filling stations.

The following incident report from February of 1999 is typical of those on the Stop Static campaign's web site: "Started fueling. Sat back in car to return gas card to purse. Returned to rear of car to hold nozzle. Fire flared up as she reached for the nozzle."

And the message of the campaign is simple: while refueling, turn off your vehicle, don't smoke, and don't re-enter your vehicle.

If you get back into your car while you're refueling, the friction of your body against the car seat can build up static electricity. Unless you release it by touching the car door or any other metal surface before you return to the pump, that static electricity can ignite the gas vapors around the pump nozzle itself.

The point is, you can build up static electricity through simple friction as you exit the car. But it won't come from your mobile phone.

A 1999 University of Oklahoma study examined the potential for mobile phones to cause explosions at gas stations, and concluded that there was no such risk. "Until there is evidence to the contrary, we suggest that no further action be initiated in this regard, and that no recommendations for further action are required of the wireless phone or petroleum industries," the report stated.

Despite the confusion it might cause, Susan Hahn, a spokesperson for the American Petroleum Institute, says there is a positive side to the rumor's persistence. "When the calls about the cell phones comes along, it gives us the opportunity to tell people about the real problem," she said.

And even though talking on your phone won't cause a fire at the pump, Hahn still suggests avoiding it. "In general, safe fuel handling really does require your full attention for the average two minutes that it takes to refuel," she said. "So you shouldn't be distracted by other activities—including using a cell phone."

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