

Radiation Dangers Allowed to Proliferate for the Consumer

Contributed by Roger Herried
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Editor's note: Radiation issues are more than nuclear power and weapons related. We report on tritium and wireless as well.

We routinely hear about stories of radioactive elements being used in a whole variety of materials. From the claims that radiation is used to temper many specialized types of plastics used in cars, to the lesser known but monumental concerns of how commercial grades of fertilizer that contains large quantities of Polonium 210 that ends up in cigarette smoke, there is a growing problem around attempts to sneak in all kinds of radioactive products into commercial use. We've all heard about how coal may be one of the largest sources of radiation, yet are they willing to tell people that this may also go for oil as well? Not all oil or coal put out the same levels of radiation, but it is there.

We can usually count on the Nuclear Regulatory Commission (NRC) or the Department of Energy (DOE) to try and deregulate all kinds of radioactive materials that usually get stopped by activist campaigns. However, under the Bush administration activists keeping an eye on these issues were overwhelmed by the scale of other seemingly more pressing battles, losing on things like the FDA's expansion of the use of ionizing radiation to sterilize food products. The former Radura symbol that was once required of any ionized food products has been removed and many new products, far beyond just herbs are now being irradiated. There was even an attempt to include food irradiation as acceptable under the Organic label.

Radiation effects all of us differently. Sadly, it impacts the fetus, weak and very old the worst. America's ALARA principle (As Low As Reasonably Allowable) means that if any radiation gets in the way of commercial products, radiation levels can be ignored. As far as the regulators are concerned, we are all 21 year old health white males. Every one of us should be far better educated as to the impacts of radiation, from excessive exposure, whether it be naturally occurring or man made.

Every year, all the radiation released into the environment becomes part of our "background radiation levels" It took billions of years for the natural background radiation on the planet to slow down enough to allow for more sophisticated life forms like ours. Very few of us walk around with geiger counters to monitor whether or not we are close to some product or other, many have been around us for decades, that could potentially hurt our cells.

Imagine walking up to a fancy old drinking fountain with an orange porcelain color, not knowing that it is 5-7 times the normal background level. Or using camping lanterns that are far worse. From ionizing to non-ionizing forms of radiation, we should all be given the proper tools and education to understand the dangers around us in a culture that doesn't give a damn about what it does to our health, as long as we don't know.

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Wal-Mart's Glow-in-the-Dark Mystery

By Tyler Hamilton

Feb 15, 2009

It began in late 2007 as a routine audit. Retail giant Wal-Mart noticed that some exit signs at the company's stores and warehouses had gone missing.

As the audit spread across Wal-Mart's U.S. operations, the mystery thickened. Stores from Arkansas to Washington began reporting missing signs. They numbered in the hundreds at first, then the thousands. Last month Wal-Mart disclosed that about 15,800 of its exit signs – a stunning 20 per cent of its total inventory – are lost, missing, or otherwise unaccounted for at 4,500 facilities in the United States and Puerto Rico.

Poor housekeeping, certainly, but what's the big deal?

In a word: radiation.

The signs contain tritium gas, a radioactive form of hydrogen. Tritium glows when it interacts with phosphor particles, a phenomenon that has led to the creation of glow-in-the-dark emergency exit signs.

It's estimated there are more than 2 million tritium-based exit signs in use across North America.

It turns out that Ontario-based companies SRB Technologies (Canada) Inc. of Pembroke and Shield Source Inc. of Peterborough have sold the lion's share of these signs, which use tritium produced as a by-product from the operation of Canadian-made Candu nuclear reactors.

The health effects of tritium exposure continue to be a hot topic of debate. It's not strong enough to penetrate the skin, and in low quantities regulators and industry groups say tritium is safe. But when inhaled or ingested it can cause permanent changes to cells and has been linked to genetic abnormalities, developmental and reproductive problems and other health issues such as cancer.

"The problem is that because it's hydrogen it can actually become part of your body," says Shawn-Patrick Stensil of Greenpeace Canada. "The radiation doesn't emit far, but when it actually becomes part of your cell it's right next to your DNA. So for a pregnant woman, for example, it can be really dangerous."

[Read the Full Article](#)

[Go to the EPA's Official Tritium EXIT Sign page](#)

[Go to the NRC's Official Tritium EXIT Sign page](#)

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Please sign the appeal to President Obama!

Petition to Halt Universal Wireless Broadband, A Public Health Hazard

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Germany Warns Citizens to Avoid Using Wi-Fi

By Geoffrey Lean

September 2007

Environment Ministry's verdict on the health risks from wireless technology puts the British government to shame.

People should avoid using Wi-Fi wherever possible because of the risks it may pose to health, the German government has said.

Its surprise ruling – the most damning made by any government on the fast-growing technology – will shake the industry and British ministers, and vindicates the questions that The Independent on Sunday has been raising over the past four months.

And Germany's official radiation protection body also advises its citizens to use landlines instead of mobile phones, and warns of "electrosmog" from a wide range of other everyday products, from baby monitors to electric blankets.

The German government's ruling – which contrasts sharply with the unquestioning promotion of the technology by British officials – was made in response to a series of questions by Green members of the Bundestag, Germany's parliament.

The Environment Ministry recommended that people should keep their exposure to radiation from Wi-Fi "as low as possible" by choosing "conventional wired connections". It added that it is "actively informing people about possibilities for reducing personal exposure".

Its actions will provide vital support for Sir William Stewart, Britain's official health protection watchdog, who has produced two reports calling for caution in using mobile phones and who has also called for a review of the use of Wi-Fi in schools. His warnings have so far been ignored by ministers and even played down by the Health Protection Agency, which he chairs.

By contrast the agency's German equivalent – the Federal Office for Radiation Protection – is leading the calls for caution.

Florian Emrich, for the office, says Wi-Fi should be avoided "because people receive exposures from many sources and because it is a new technology and all the research into its health effects has not yet been carried out".

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Roger Herried's previous article on Culture Change was [Why a Nuclear Free World is Important](#)

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