

## 30 Ways Chernobyl and Dying Nuke Industry Threaten Our Survival

But when Chernobyl blew up 30 years ago, it exposed lies number 2 and number 3: that a commercial reactor could not explode and that the industry's radiation would kill no one.

Here's a short list of 30 ways these two tragic flaws are killing us all. They are discussed with experts Joe Mangano and Dr. Janette Sherman on my [recent Solartopia show](#).

- 1. According to studies by three top European scientists**, first published in 2009, more than **985,000 people have died** from Chernobyl's fallout.
- 2. Impactful radioactive contamination is still in evidence in soil** throughout Ukraine, Belarus and as far away as Scotland.
- 3. By some estimates, children born throughout regions downwind of Chernobyl** have **suffered radiation-related diseases** at rates affecting up to 80 percent of those born in critical areas.
- 4. Reindeer, sheep and other animals** across northern Europe are still too heavily contaminated to be safely consumed.
- 5. Radioactive fallout from Chernobyl** hit northern California within 10 days of the explosion, followed by a 60 percent drop in bird births recorded at the Pt. Reyes sanctuary north of San Francisco.
- 6. Epidemiological studies by Mangano, Sherman and others show that nearby infant death rates** rise when commercial reactors open, and drop when they shut.
- 7. Epidemiological studies show** direct links between reactor operations and cancer rates downwind, including a 70 percent excess of thyroid cancer in the four counties surrounding New York's **Indian Point** reactors as opposed to the nation as a whole.
- 8. When Chernobyl blew up**, industry apologists emphasized that such a disaster at a Soviet reactor had nothing to do with American

nukes. But on March 11, 2011, four General Electric reactors exploded at Fukushima (three melted, and their cores have yet to be found).

**9. The explosions at Fukushima** by estimates of at least one Japanese scientist have spewed at least **30 times as much Cesium 137** as was released by the atomic bombs at **Hiroshima and Nagasaki**.

**10. The Fukushima disaster still dumps** at least 300 tons of radioactive water into the Pacific Ocean every day.

**11. Thousands of tons of contaminated water** are being held in flimsy storage tanks at Fukushima, at least some of which are likely to give way; serious leaks of radioactive water are also on-going at Indian Point, Florida's Turkey Point, numerous other commercial reactor sites and at the Hanford (Washington) military reservation.

**12. The Japanese government and Fukushima's owner** (Tepco) are hinting strongly they would like to dump still more thousands of tons of radioactive water directly into the Pacific.

**13. At least 7,000 clean-up workers** are **still being exposed** to radiation at Fukushima every day.

**14. It remains unclear exactly where the cores from Units 1, 2 and 3 might be**, what can be done to contain them and exactly what kinds of long-term dangers they pose.

**15. Thyroid abnormalities among children** in the Fukushima area are **far beyond normal**.

**17. Radioactive hot spots clearly linked to Fukushima** are being found throughout Japan, some as far away as Tokyo.

**18. Japanese activists have kept all but three of Japan's 54 reactors shut** since Fukushima, but the pro-nuke Abe regime wants to stage some 2020 Olympic events near the stricken reactor site.

**19. Some 11,000 highly radioactive fuel rods are still strewn around the Fukushima site** with no prospects for safe long-term storage. Nowhere on earth has safe long-term storage of atomic wastes been proven.

**20. Though the explosions at Fukushima have been linked to the tsunami** that wiped out back-up generators, primary damage (especially at Unit 1) was caused by an earthquake whose epicenter was 120 kilometers distant, far further than many fault-lines near scores of other reactors around the world.

**21. Two U.S. reactor sites** (Perry in Ohio and North Anna in Virginia) have already suffered significant damage from earthquakes.

**22. Among many others, reactors at Diablo Canyon, California and Indian Point, New York,** are very near major fault lines, with the potential death tolls in downwind Los Angeles and New York City stretching into the millions.

**23. Dr. Michael Peck, resident Nuclear Regulatory Commission (NRC) safety inspector at California's Diablo Canyon has warned** that the two huge reactors there cannot withstand a likely earthquake delivered by any of the dozen seismic faultlines surround the site. Peck filed his report within the NRC but it was made public a year later by Friends of the Earth and other community groups. The NRC has dismissed Peck's warnings and he has been moved to the Commission's Chattanooga office.

**24. As terrorists slaughtered innocent civilians in Brussels, the New York Times reported** that Belgian **authorities evacuated two reactors** which they felt were vulnerable to attack. As mentioned above, Germany has now asked Belgium to shut these nukes down.

**25. A wide range of reports dating back at least to the 1970s have confirmed** that throughout the entire global nuclear industry, commercial reactors simply **cannot be guaranteed** to be safe from a concerted terrorist attack, making them all what Karl Grossman has called "pre-deployed weapons of mass destruction."

**26. The technological basis for the 99 U.S. reactors now operating dates far back** in the previous century, as the average age of an operating U.S. nuclear American reactor is now roughly 35 years old, with Davis-Besse (near Toledo, Ohio) distinguished primarily by four major cuts into its containment dome, and a shield building that is literally crumbling.

**27. Since Fukushima on March 11, 2011** significant safety advances advocated by the staff of the NRC and others have not been installed at U.S. nukes despite widespread warning of defects.

**28. Seven top NRC engineers took the rare and daring step** of filing a public 2.206 petition warning that 98 of 99 current US reactors have serious basic flaws in the electrical sector of their emergency core cooling systems, which are designed to protect the public from a major catastrophe.

**29. Former NRC expert David Lochbaum, now with the Union of Concerned Scientists, has warned** that the inspectors' findings on the faulty cooling system wiring are quite serious, and could have been solved easily and cheaply several years ago, when they were first discovered.

**30. The corrupt regulatory culture of the NRC is now in the process of re-licensing every American reactor**, with projected lifetimes stretching to 60 years, two decades beyond original design capacity, guaranteeing that America's 99 remaining reactors will continue to dangerously decay, putting us all in harm's way. All the relicensing has proceeded without a requirement that the industry get private insurance, which is still unavailable after more than a half-century of operations.

There is much much more. The on-going radiation releases from these jalopy reactors impact our health and undermine our eco-systems every day, threatening our future on this planet, and standing in the way of the Solartopian Revolution in renewables and efficiency that must ultimately save our planet from ecological and economic ruin.

*Harvey Wasserman's Organic Spiral of U.S. History will be published soon on [www.solartopia.org](http://www.solartopia.org). He edits [www.nukefree.org](http://www.nukefree.org) and wrote Solartopia! Our Green-Powered Earth.*