## **Environmental Costs of Nukes**

"Even a very 'limited' nuclear war, involving less than 0.5% of the world's nuclear weapons, would be enough to cause catastrophic global climate disruption and a worldwide famine, putting up to 2 billion people at risk."

Dr. Ira Helfand, International Physicians for the Prevention of Nuclear War

**Nuclear weapons are an environmental disaster**. The production of nuclear weapons has polluted vast amounts of soil and water at hundreds of nuclear weapons facilities all over the world.

Mining and processing uranium for bombs produces huge amounts of highly toxic, long-lasting substances. These bi-products and waste are carcinogenic, cause genetic mutations and can remain hazardous for decades to over 100,000 years.

**U.S.** Nuclear weapons production facilities contaminated air, groundwater, surface water, and soil. Dept. of Energy has 14 weapons production and 17 research facilities in 13 states. DOE clean up involves 107 weapons and nuclear energy sites (an area equal Rhode Island and Delaware). Of these,15 are still active and 92 have been allegedly cleaned up.

**Hanford Nuclear Reservation in Washington is the worst**. It is a Superfund site and may never completely cleaned up. Facilities in Oak Ridge, TN and Savanna, GA are also Superfund sites. Rocky Flats, CO is now a wildlife refuge but closed to the public.

**Water Pollution.** From 1944-1988 Hanford used 444 billion gallons of Columbia River water to cool nuclear rectors for making plutonium returning contaminated radioactive water to the river. The EPA estimates making 100 metric tons of plutonium during that time left 100 million gallons of hazardous liquid waste at weapons production facilities.

**No country has a safe nuclear waste storage facility.** Ongoing production of both nuclear weapons and nuclear power continues to create nuclear waste.

**Nuclear testing spread radioactive isotopes widely across the world.** Carbon<sup>14</sup>, Cesium<sup>137</sup>, Strontiun<sup>90</sup> are everywhere. Strontium<sup>90</sup> does not exist in nature but now is found in everyone's bones and teeth.

**2.4 million deaths from nuclear tests.** Doctors estimate the atmospheric tests conducted 1945-1980 will cause cancer and eventually kill 2.4 million of people.

All nuclear weapons and nuclear energy producing nations have caused environmental contamination. Production and testing in the U.S, U.K, France, Russia, China, India, Pakistan, Algeria, Kazakhstan, South Pacific and mining in Namibia, Canada, Australia and the former East Germany.

## **Digging the Hole Deeper**

Nuclear weapons are militarily useless, but our government is spending \$1.7 trillion "modernizing" the arsenal, delivery systems & production facilities creating more toxic waste & igniting another nuclear arms race.