



uranium in Iraq. It explodes into dust upon impact. A 2010 study found ominously higher reported cancers (child leukemia, breast cancer, brain tumors, lymphoma) than expected, higher infant mortality post-2004 than in comparative Middle East countries, and an alarming change in sex ratio at birth, with much fewer boys.

Landmines & Unexploded Bombs



The first landmines were used in the Second World War. *Every 20 minutes, a landmine explodes and maims or injures a civilian.* US-made land mines and cluster bombs, spread over wide areas of Africa, Asia, Latin America, and the Middle East, continue to spread death and destruction even after wars have ceased. As of the late 20th century, 80 percent of the maimed and dead were civilians, with women and children having much higher fatality rates than men.

50% of unexploded cluster bombs detonate when jolted. Like landmines, they make it much more difficult to recover from war: farming, herding, forestry and accessing water sources all become hazardous. Tourism is impossible.

The Military Assault on Climate

Sara Flounders writes, "By every measure, *the Pentagon is the largest institutional user of petroleum products and energy in general.* Yet the Pentagon has a blanket exemption in all international climate agreements. ... Any talk of climate change which does not include the military is nothing but hot air."

The US Air Force (USAF) is the single largest consumer of jet fuel in the world. Fathom, if you can, the astronomical fuel usage of USAF fighter planes: the F-4 Phantom Fighter burns more than *1,600 gallons of jet fuel per hour*

and peaks at 14,400 gallons per hour at supersonic speeds.

Barry Sanders observes with tragic irony that, while many of us assiduously reduce our carbon footprint through simpler living, eating locally, recycling, reusing, conserving energy, taking public transportation, installing solar panels, and so on, *the single largest institutional polluter and contributor to global warming — the US military, paid for by our taxes — is immune to climate change concerns.*

Just how much petroleum the Pentagon consumes is one of the government's best-kept secrets. Barry Sanders calculates that the US military consumes as much as one million barrels of oil per day and contributes 5 percent of current global warming emissions: *0.0002 percent of the world's population is generating 5 percent of climate pollution.*

What Can We Do?

- Insist that our leaders follow *The Precautionary Principle* – the golden rule of environment.
- Read a longer version of piece with full citations & learn more at: LiSierraClub.org/war-and-environment

"60% of the world's CO2 emissions between 2003 and 2007 originated in U.S.-occupied Iraq, due to the enormous amount of oil and gas required [. . .], not to mention the toxins released by fighter jets, drone planes, and the missiles and other ordnance they fire at Iraqis."

– Steve Kretzmann, OCI



War's Dirty Footprint



“The U.S. Department of [War] is the world’s worst polluter, belching, dumping, and spilling more pesticides, defoliants, solvents, petroleum, lead, mercury, and depleted uranium than the five biggest American chemical corporations combined”
 – Steve Kretzmann, Oil Change International



Why Focus on the US Military?

“The United States is responsible for over 40% of the world’s total military spending.”

Beyond Immediate Casualties

War once was fought with sticks and stones. Modern warfare leaves a *legacy of long-term devastation & harm* to the planet, and therefore to *life on the planet* as well.

1997 Exemptions for U.S. Military

In 1997, the U.S. Congress exempted the US military from federal pollution safeguards. “The Pentagon’s push for blanket exemptions [...] makes a mockery of national defense. Using national security to sacrifice our nation’s environmental security will endanger our health, leaving us less safe.” (Karen Wayland, Natural Resources Defense Council)

Land Shortages

Millions of acres of land that could be used for growing food or creating communities are instead reserved for military purposes. Adding to this are the thousands of square miles of abandoned *sacrifice zones* from weapons testing, because the land is too dangerous and expensive to clean up.

Scorched Earth

War destroys crops, contaminates water supplies, burns forests and destroys homes. Our wars in Iraq have helped

to *desertify the land*, and contributed to Iraq’s shift from a food exporter into a country that must import 80% of its supply. The Israeli army, responding to the Hamas attack in 2023, has destroyed over half of Gaza’s buildings and most of its infrastructure. Rebuilding will consume more resources including energy.

Largest Polluter in the Country

Public data revealed that the Pentagon was generating *a ton of toxic waste per minute, more toxic waste than the five largest US chemical companies.*⁶ One need only look at the Grumman site in Bethpage to see this.

Sickening Land and People

Nearly *3/4 of our 1,300 Superfund sites* – waste sites classified as those most hazardous to human and ecological health – *are abandoned military bases or military-industrial manufacturing and testing sites.* The Pentagon has criminally abandoned rusting barrels of chemicals and solvents and millions of rounds of ammunition in bases around the world.

One example in the US is Camp Lejeune: For over 30 years, the base contaminated its own water supply with benzene. However, government authorities adamantly *dismissed ongoing reports of cancers, miscarriages, and birth defects* among the 500,000 military and family members as unrelated. Vieques in Puerto Rico, Hanford in Washington State and Rocky Flats in Colorado are just a few examples of extremely polluted sites that continue to leave a legacy of cancer.

Perchlorate, an ingredient of solid rocket fuel and a byproduct of rocket and missile testing and explosives, is now *omnipresent in the environment & in over half of all food tested.* This toxic chemical accumulates in the thyroid gland and harms fetuses, infants and children at even very low levels. In 2011 the EPA regulated perchlorate.

Chemical Warfare & Agent Orange

Dioxin-contaminated toxic defoliant Agent Orange was used to destroy the Vietnamese and adjacent Laotian forest cover and food crops. (This was in fact *first-strike chemical warfare, in violation of the 1925 Geneva Convention* against biological and toxin weapons warfare.) *Dioxin persists in the environment, causing cancer, birth defects and many other diseases for generations.*

The Radioactive Legacy of War

Between 1946 and 1958, the US dropped more than sixty *nuclear weapons* on the people of the Marshall Islands, yielding ongoing *high cancer rates* for the Islanders. Cancer rates in the US rose with above-ground weapons testing in southern Nevada. *Downwinders* and their livestock were the hardest hit. The actor John Wayne developed cancer 8 years after filming at a highly radioactive location.

The US has used *Depleted uranium (DU)* since the 1991 Persian Gulf war and supplied DU weapons to Ukraine in 2023. Twice as heavy as lead, it is used for coating armor-piercing munitions and protective tank plating. It is very cheap because its raw material is radioactive waste. Some estimate that we used over *1,000 tons of depleted*