



Keep Yellowstone Nuclear Free

INL Plutonium-238 production talking points

The following information is intended to help the public better understand and form questions about the U.S. Department of Energy's (DOE) plan to consolidated all of the production of Plutonium-238 in the United States at the Idaho National Laboratory (INL).

Jackson is facing the most serious threat from INL since the Plutonium Incinerator

The U.S. Dept. of Energy (DOE) wants to produce Plutonium-238 at the Idaho National Lab (INL), 90 miles upwind of Jackson Hole, Yellowstone, and Grand Teton National Parks. The DOE wants to use an obsolete, dangerous nuclear reactor with a history of accidents to produce the plutonium. This nuclear reactor sits in a very active earthquake zone. If this project goes forward, our lives, lands, and national treasures will be exposed to enormous risks of radiation poisoning and contamination. **INL is the wrong place for this dangerous DOE project.**

What you need to know about the DOE's dangerous plan:

- The DOE wants to use the Advanced Test Reactor (ATR) to produce the plutonium-238. This reactor is 40 years old and has a history of accidents.
- The Advanced Test Reactor lacks a proper containment system to protect the public and the environment in the case of a meltdown, fire, earthquake, or serious accident.
- The ATR does not even meet the Nuclear Regulatory Commission's less-stringent licensing criteria for a commercial nuclear power reactor, let alone a national security reactor that will produce plutonium-238.
- DOE admits that a major accident at the ATR could release 175,000,000 curies of radiation, compared to the 100,000,000 curies of radiation released during the Chernobyl meltdown.
- During the 1990s, the ATR experienced 11 emergency shutdown "scrams" due to system failures.

- The ATR's Emergency Firewater Injection System (EFIS), designed to pump water into the reactor core during an accident, does not meet current seismic codes. The DOE's own engineers state that during a major earthquake, the EFIS could completely fail, causing the reactor core to be exposed to the air and possibly resulting in a meltdown.
- Plutonium-238 is one of the most toxic substances on earth. It is 100 times more radioactive than the plutonium used in nuclear weapons. One speck of plutonium-238 inhaled can cause cancer.
- The ATR sits in the middle of a highly active seismic zone. The government's earthquake rating for the INL site is 3 out of 4. (The city of San Francisco's earthquake rating is also a 3). The area immediately adjacent to INL has an earthquake rating of 4.
- This project could be handled more safely at DOE's facility at Los Alamos, New Mexico, where most of the infrastructure is already in place.
- DOE should build a new, state-of-the-art reactor, with the latest technology and safety systems, at Los Alamos. Los Alamos is NOT in a high-risk seismic zone.
- The DOE says it did not consider building a state-of-the-art reactor at Los Alamos because "it is cost-prohibitive." THE DOE IS PUTTING DOLLARS AND CENTS AHEAD OF PUBLIC HEALTH AND ENVIRONMENTAL SAFETY.
- The DOE has not adequately explained what types of radioactive and other toxic wastes will be generated by this project, nor have they sufficiently addressed what types of airborne emissions will be produced during the plutonium production.
- INL intends to use filtration systems to prevent radioactive and other toxic emissions from escaping into the environment. However, during the 1990s there were 30 emission control system breakdowns at INL. Eight of those breakdowns involved filter failures, causing dangerous levels of radiation to be released into the atmosphere.
- Currently, DOE estimates that there will be at least 55,000 drums of transuranic waste generated by this project. Transuranic waste is extremely radioactive and dangerous.
- DOE states that all transuranic waste will be shipped out of INL. However, the Waste Isolation Pilot Plant (WIPP), which was built to be a national repository for nuclear waste, will not currently accept transuranic waste from this project. Therefore, tens of thousands of drums of highly radioactive waste could remain in drums at INL for decades.
- INL is already littered with leaking and unstable drums of transuranic and other radioactive and toxic waste. DOE should not undertake a project that could result in more hazardous waste piling up at INL.