



Permanent Plutonium Pits = Permanent Risks

Now that the Los Alamos National Laboratory (LANL) has been designated as the preferred site for permanent pit production, what else comes along with this dubious distinction? **Permanent spending of taxpayers' money, permanent increased risk to the public, permanent increased water use, and permanent increased waste production come along with the preferred alternative, too.** Expanding pit production may also be a permanently wrong direction, constricting the opportunity for needed mission diversification at the Lab to address today's critical national security issues, such as WMD proliferation, maritime port security, energy independence and global climate change.

The National Nuclear Security Administration (NNSA), the Department of Energy's nuclear weapons agency, is proposing to revitalize and transform its nuclear weapons complex, for which pit manufacturing at LANL is the crucial production mission. The NNSA "Complex Transformation" plan calls for LANL to produce 50 to 80 pits per year. The impacts of this "50/80 Alternative" follow. Some of the other alternatives have greater estimated impacts and increased risks.

In order to produce 80 pits, LANL needs a new facility. The current estimated construction cost is \$2 billion dollars for the Chemistry and Metallurgy Research Replacement (CMRR) project, which is the proposed facility that will directly support pit production at LANL. The annual cost for operating facilities at LANL's expanded plutonium complex, for which CMRR is the keystone, will be \$240 million per year. Separately designated pit production costs are approximately the same. Annual security costs will be \$45 million. **The total operational costs for plutonium pit production at LANL will be around a half-billion dollars per year, and this does not include facility construction and upgrades costs.**

If a serious seismic event were to occur at LANL, there would be widespread damage. Facilities at LANL would be affected and the public and workers at the site would be exposed to increased risks from both radiological and chemical releases. A recent seismic study predicts 50% greater ground motion than previously believed. Because of the Lab's seismically fragile fire water supply system, sustained fires may occur. The accident with the highest postulated consequences to the offsite population is this combined earthquake and fire scenario. **A projected 26 "Latent Cancer Fatalities" (LCFs) in the offsite population within a 50-mile radius could result from such an accident.** A person at the boundary of LANL, called the "maximally exposed individual" (MEI), would have a one in 19 chance of an LCF. Granted, earthquakes are low-probability events, but building plutonium facilities in a seismically vulnerable zone is literally playing with fire.

Other postulated accidents could affect the offsite population as well. One is an explosion in a plutonium feed casting furnace used for pit production. **For this accident, there is a projected 19 Latent Cancer Fatalities to the population within a 50-mile radius.**

More Precious Water

Under expanding plutonium pit production, **the 50/80 Alternative would accelerate LANL's water use by approximately 12 percent, or an increase of 43,000,000 gallons per year.** Clearly, water is northern New Mexico's most precious resource. In an uncertain future, why should more water be devoted to unneeded bomb production?

The Preferred Alternative – Permanently Increased Waste

The 50/80 Alternative would generate an additional **575 cubic yards of radioactive transuranic (TRU) waste per year, triple the amount produced in 2005.** It is proposed that this increasing TRU waste be packaged and shipped to the Waste Isolation Pilot Plant (WIPP) in southern New Mexico for disposal. However, WIPP is already about 40% full from past bomb making and the remaining space is already all accounted for. There is currently no room for added TRU waste. Further, the CMMR is planned to operate for 30 years after WIPP's scheduled closure in 2035. Where will yet more bomb-making wastes go?

The 50/80 Alternative will also generate an estimated **1,850 cubic yards of "low-level" radioactive wastes annually.** These wastes would be processed at the Solid Waste Management Facility in TA-54 and disposed of on-site at TA-54's Area G. But Area G itself is due to be closed in 2015. There is still time for the public to convince the New Mexico Environment Department to require that LANL remove this waste rather than cap and cover and leave it in place as the Lab plans. However, LANL also plans to expand Area G into "Zone 4," which will be much of the same – unlined dumps above our aquifer that will likely leave radioactive wastes permanently.

The 50/80 Alternative would generate an **additional 265 tons of hazardous chemical waste annually.** LANL generated 217 tons in 2005. All these wastes have to be collected at four existing storage facilities (two additional ones are planned) for shipment and disposal at an offsite commercial facility.

Other Potential Impacts of the Preferred 50-80 Alternative

TA-55 contains core and buffer "Areas of Environmental Interest" for the Mexican spotted owl, a federally listed threatened species, and other threatened bird species may use the habitat for foraging or hunting. However, it is expected that the 50/80 Alternative would have minimal affect on the Mexican spotted owl because construction will be in an existing highly developed area. In other words, the owls were run out of this area long ago.

Due to the high density of Ancestral Puebloan artifacts at LANL, there is a high probability that "cultural resources" could be impacted during construction anywhere on Lab property, including TA-55. Will construction be permanently stopped if an archeological resource is found?

~SK March 13, 2008

Submit comments on the Complex Transformation to: ComplexTransformation@nnsa.doe.gov