

## FAT MAN AND LITTLE BOY: The first two production weapons

In 1943, the nuclear production complex consisted of three sites.

- One nuclear reactor at the Hanford site irradiated uranium targets to generate plutonium. The targets were then dissolved at Hanford's PUREX Plant and the resultant plutonium metal was sent to Los Alamos National Laboratory (LANL).
- In parallel, more than 1,100 Calutrons at Oak
  Ridge were running continuously for a full year
  (employing 22,000 people around the clock),
  taking naturally occurring uranium ore and
  enriching and extracting the critical U-235 metal.
  The resultant uranium metal was also sent to LANL.
- LANL was the original design and construction site for the trinity weapon and subsequent Fat Man and Little Boy weapons. LANL took the plutonium metal from Hanford and the uranium metal from Oak Ridge and machined them into the nuclear explosives that went into Fat Man (plutonium) and Little Boy (uranium).

The nuclear weapons production complex eventually grew from three sites and several facilities to more than 107 sites in 31 states at the height of the Cold War.

The environmental legacy left by the Cold War is one of the most massive cleanup projects in the world. EM's cleanup program represents the federal government's fifth largest liability.

