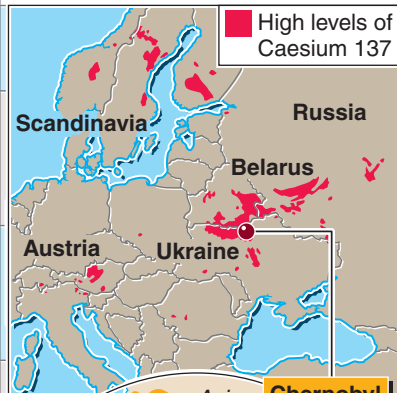


The legacy of the world's worst nuclear accident

It is now twenty years since the number four reactor at the Chernobyl nuclear power plant exploded, showering large areas of Europe with radioactive fallout. A 2005 report estimated that the accident may ultimately claim up to 4,000 lives, many from long-term illnesses, but the real figure could be much higher

Soil contamination after accident



Radioactive cloud: May 6, 1986

THE FUTURE

New Safe Confinement

Will enclose ruin for up to 100 years until more permanent solution is found

1 Foundations: Two giant rails will be laid over lines of concrete panels sunk through radioactive soil

2 Arch: Tubular steel sections raised into place 180m from reactor to minimise radiation exposure

3 Outer cladding: Three layer sandwich panels form roof and vertical end walls of structure

4 Positioning: Structure slides into place to cover sarcophagus

5 Deconstruction: Robot cranes take apart and remove sarcophagus

TIMELINE OF EVENTS

► **April 25, 1986:** To coincide with routine shut-down, operators begin test to observe reactor at low power

► **April 26:** Operational error allows power to drop too low. *RBMK-1000* reactor, a flawed design, is unstable at low power levels. Also, key safety features are disabled to run test

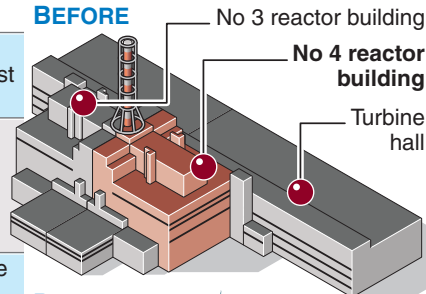
► **April 26, 01:23 hours:** Power surge causes two explosions, destroying reactor core, blowing off building roof and starting fires. Plume of highly radioactive matter released into air

► **April 26-May 9:** Cleanup operation commences. Up to 600,000 workers drafted in, some braving lethal radiation levels. 116,000 people living within 30km of plant begin evacuation

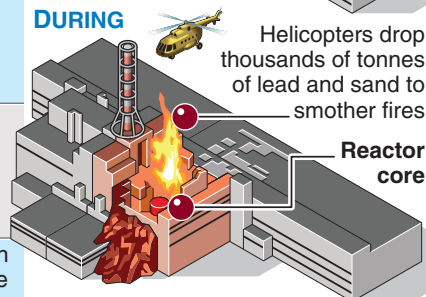
► **May-November:** Hasty construction of concrete "*sarcophagus*" to encase ruins of reactor four. Structure is now crumbling and in danger of collapse

► **2006-2008:** Construction scheduled for *New Safe Confinement (NSC)*

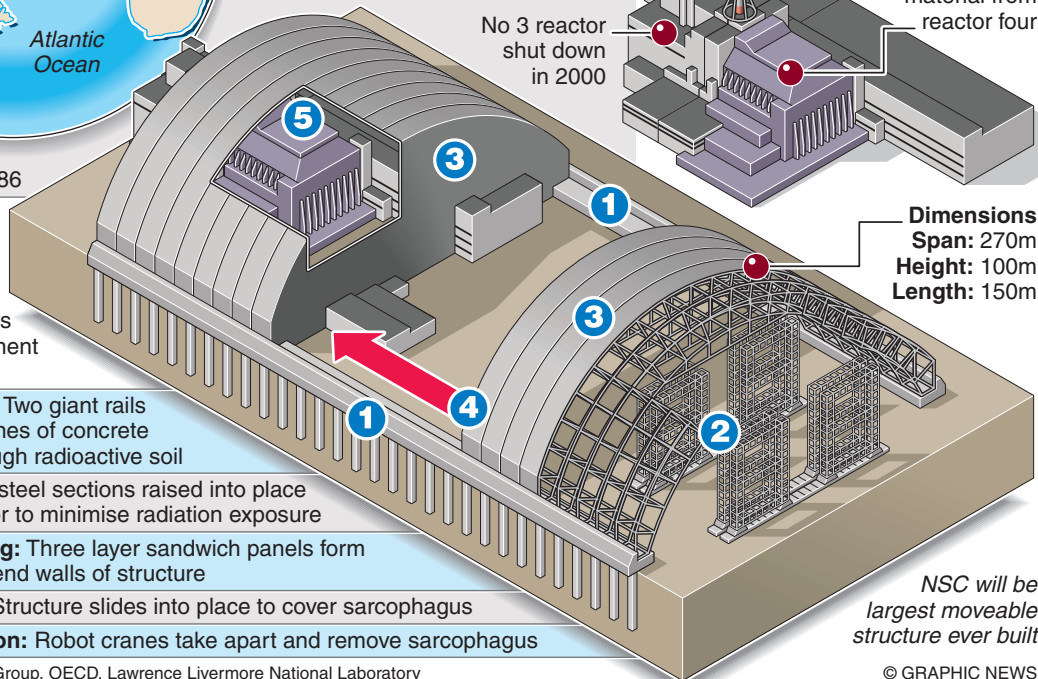
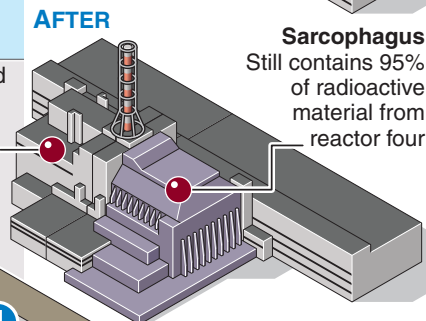
BEFORE



DURING



AFTER



NSC will be largest moveable structure ever built