



## **No Health Risk from Plutonium at Fukushima Daiichi**

*(Last updated 3/29/11)*

- Tokyo Electric Power Co. on March 28 discovered minute levels of plutonium in the soil at five locations at the Fukushima Daiichi nuclear power plant site. The plutonium measured is as little as was in the environment in Japan following nuclear weapons testing during the Cold War.
- The plutonium at the site can be monitored and controlled, and the levels are not harmful to human health.
- Plutonium is not a naturally occurring element and is produced as a byproduct of nuclear energy generation.
- Low-enriched uranium fuel is manufactured with no plutonium in it, but plutonium builds up as a result of operation of the reactor. By the time uranium fuel rods are removed from the reactor, each assembly contains about 1 percent plutonium and generates more power from plutonium than from uranium. Nuclear fuel in all reactors and spent fuel pools contains small amounts of plutonium.
- Fukushima Daiichi reactors 1, 2, 3 and 4 contain more than 4,000 nuclear fuel assemblies in both the reactors and the spent fuel storage pools. The vast majority of these assemblies are low enriched uranium fuel. Only 32 are mixed oxide fuel assemblies made of uranium oxide and plutonium oxide. This represents approximately three quarters of 1 percent (0.75 percent) of all the fuel in the reactors. All 32 mixed oxide assemblies are in reactor 3.