

# Contamination and Containment

A large part of the battle at Fukushima Daiichi is preventing radioactive contamination from spreading out from the plant. Right after the accident, much of the radiation released from the meltdowns was spread through the air. That's now less of a concern: The plant is no longer spewing radioactive steam, and Tepco has taken steps to keep radioactive dust and other particles from

flying out of the damaged reactor buildings. But contaminated water is still a big problem, with Tepco finding high levels of radioactive elements in wells and trenches at the site, and in the sea itself. Tepco is trying to keep the water problem contained with walls, caps, barriers and chemicals that harden soil.

—Phred Dvorak, Moeko Fujii and Rosa de Acosta



**1 MONITORING POINTS:** Tepco tracks water contamination by taking samples at wells and monitoring points in the Fukushima Daiichi compound and the nearby bay.

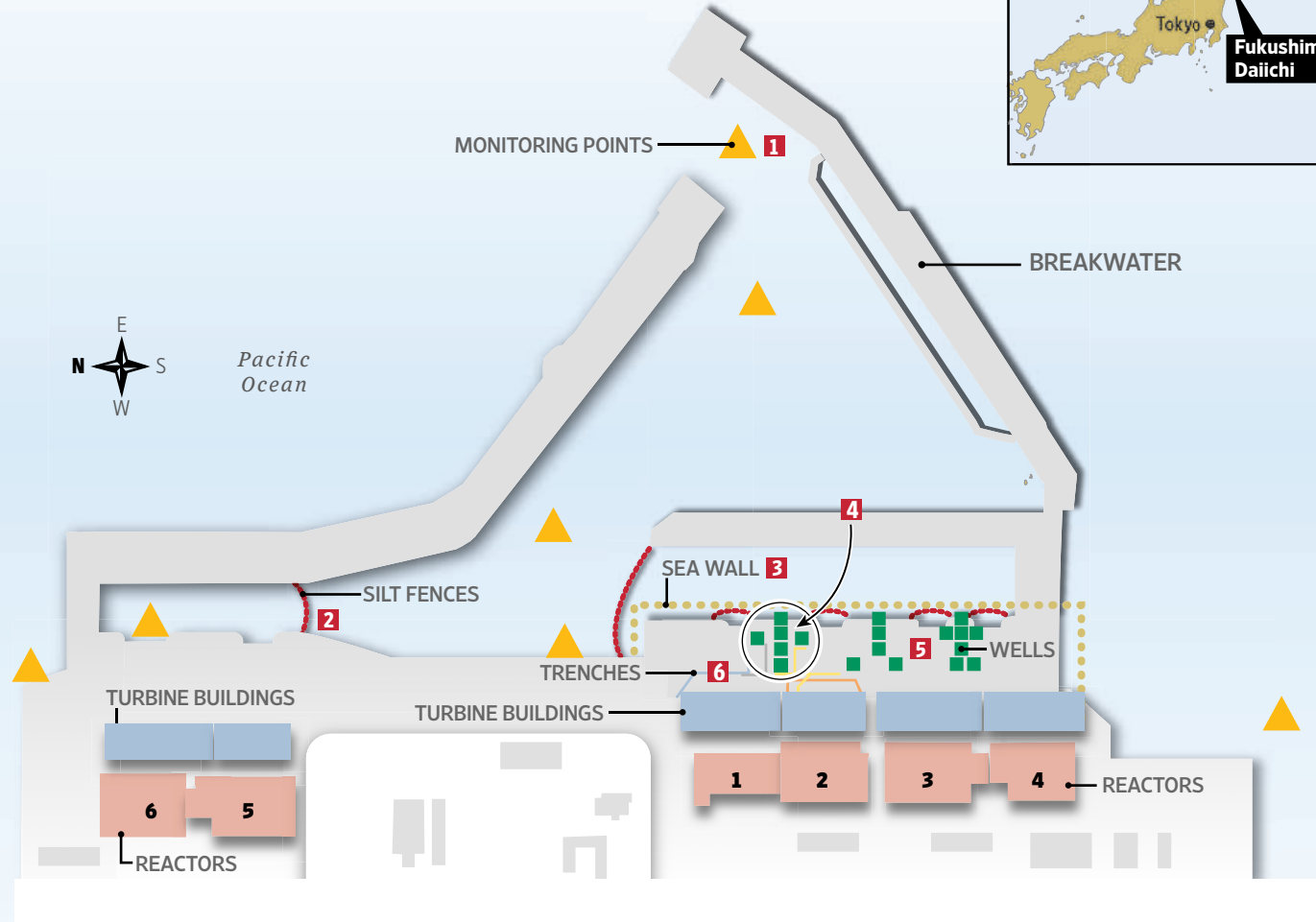
**2 SILT FENCES:** To keep radioactive contamination as closely contained in the waters by the Fukushima plant as possible, Tepco has strung up floating curtain walls called 'silt fences' that screen off the coast near the damaged reactors.

**3 SEA WALL:** Tepco is building a gigantic wall on the seaward side of the plant, enclosing the waters nearest the damaged reactors 1-4. Construction is slated to end in mid-2014.

**4 HARDENING THE GROUND:** As an emergency measure to keep the highly contaminated water out of the sea, Tepco has treated the ground by the coast with chemicals that harden the soil. The chemicals were injected in a double row of 228 spots parallel to the coast. The company is now planning to harden the ground on the landward side of the contaminated area, to try to keep more groundwater from flowing in.

**5 WELLS:** Radioactivity levels are spiking in wells dug to monitor groundwater contamination on the seaward side of the damaged reactors.

**6 TRENCHES:** Tepco has found radioactivity levels that are millions of times higher than allowed — and significantly higher than found in groundwater — in trenches that housed pipes



and cables leading to the sea from reactors 1-4. Some of this water may have been trapped there since the March 2011 accident. More may have seeped into the trenches

from leaks in the heavily contaminated turbine buildings. Tepco plans to draw the contaminated water out and fill in the trenches so more water won't collect there.

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For more information on the task ahead for Tepco, go to an interactive graphic on the Fukushima Daiichi contamination at [wsj.com/japanrealtime](http://wsj.com/japanrealtime).