Countermeasures for the Contaminated Water Issue at TEPCO's Fukushima Daiichi Nuclear Power Station

- Contaminated ground water was detected in the area between the turbine buildings and plant port of the Fukushima Daiichi NPS.
- Fundamental countermeasures will be taken in several phases in addition to the immediate countermeasures.

Three principles for contaminated water countermeasures

1. Removing the source of the contamination
2. Isolating ground water from the contamination source
3. Preventing leakage of the contaminated water

Immediate countermeasures

1. Removing water containing high amount of radioactive materials from the trench (underground space where the pipes and electronic cables are set) (start from August 22)【Removing】
2. Improving the soil by sodium silicate (liquid glass), paving the land surface with asphalt, pumping out the underground water (pumping out: start from August 9) 【 Isolating】【Preventing leakage 】
3. Pumping out ground water from the mountain side (Bypassing ground water)【 Isolating】

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Fundamental countermeasures
(Coming 1-2years)

1. Pumping out the ground water from the sub-drains【 Isolating 】
2. Installation of sea-side impermeable walls 【 Preventing leakage 】
3. Installation of land-side impermeable walls adopting the frozen soil method【 Isolating 】 【Preventing leakage 】
4. Installation of high performance contaminated water treatment equipment【Removing】 etc.

Current situation of the ground water

TEPCO estimates that the whole area of units 1 to 4 has approx. 1000 m^3 of ground water flow every day and 400 m^3 of this flows into the basement of the facility buildings. And some part of the other water is considered to be contaminated by the water in the trench and flows into the port through the soil.

Overview of the countermeasures