

1. Preventive and Multi-layered Measures against Contaminated Water Issue

1) **Remove** sources of contamination key measures already being implemented or decided :

- Remove contaminated water in the trenches and isolate the trenches
- Treat contaminated water with multi-nuclide removal equipment (ALPS)
- Install high performance multi-nuclide removal equipment at government expenditure

Key additional measures:

- Install more multi-nuclide removal equipment
- Take measures to prevent water leakage from tanks (capturing strontium contained in the soil)
- Clean up sea water in the harbor

2) **Isolate** water from contamination key measures already being implemented or decided :

- Pump up groundwater for by-passing
- Pump up ground water from sub-drains near buildings
- Install land-side frozen soil impermeable walls at government expenditure
- Pave the area between building and sea

Key additional measures:

- Implement “broader area pavement (surface waterproofing) in the site” or “limited area pavement with an impermeable enclosure”, also consider dose-reduction measures (e.g. decontamination of land surface)
- Install gutters at top of tanks

3) **Prevent leakage** of contaminated water key measures already being implemented or decided :

- Improve soil with sodium silicate
- Install sea-side impermeable walls
- Install further tanks (replace bolted-joint tanks with welded-joint tanks)

Key additional measures:

- Accelerate installation of welded-joint tanks
- Prepare countermeasures against large tsunami (e.g. install watertight doors into buildings)
- Prevent contaminated water leakage from buildings
- Reduce length of contaminated water transfer piping

- Need to accelerate installation of further tanks to the extent possible with combined efforts of public- and private-sectors, such as encouraging cooperation of relevant business operators, together with acceleration of installing welded-joint tanks, in order to secure enough storage capacity of tanks in preparation for waves on the surface of the liquid caused by earthquake.
- Press forward the efforts such as verification of technology with Fiscal Year 2013 Supplementary Budget for the additional measures with high technical difficulties such as the measures to clean up the sea water in the harbor and to remove radioactive materials in the soil.
- Make a comprehensive evaluation of all options for tritiated water containing residual risks as soon as possible and consider appropriate measures.

2. Enhanced Communication as Measures to Prevent Damage to Reputation

- Provide evidence-based information in an internationally open manner. Under the cooperation of relevant ministries, enhance the integrated communication of the Team for Decommissioning and Contaminated Water Countermeasure.