## 3 Removal of radioactive materials from the seawater in the harbor

## [Current situation]

Although the concentration of radioactive materials in the seawater outside of the harbor is lower than radioactivity limits set in a public notice, the concentration of radioactive materials in part of area inside the harbor in front of inlet channels of Units 1–4 exceeds the radioactivity limits and is not declining even though cesium in the seawater is continuously removed (\*). (See Figure 3–1 for data of water measured in front of inlet channels of Units 1–4.)

Also, since radioactive materials (tritium, strontium) have been detected in groundwater near a revetment on the east side of the turbine buildings of Units 1 and 2, soil improvement work is being implemented as quickly as possible and an impervious wall on the sea side is being built to prevent further contamination through groundwater.

(\*) Current cesium removal measures: Fabric absorbents of cesium have been installed in the sea and their effects are being examined.

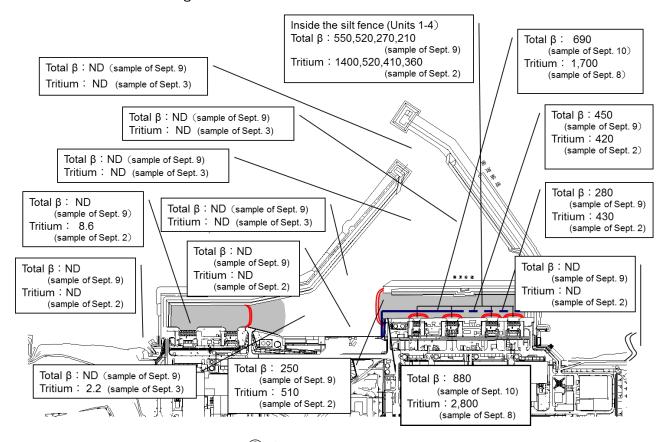


Figure 3-1 Water data inside the harbor

## [Technologies needed]

- (1) Removal of radioactive cesium and strontium inside the sea
- Radioactive cesium and strontium in the sea inside the harbor need to be removed, which is to say, their concentrations need to be decreased dramatically.
- Upon removal of above mentioned materials, the decrease in efficiency of removal due to absorption of materials other than targeted materials, such as magnesium and calcium should be limited.
- The amount of wastes produced due to cesium and strontium absorption should be limited.
- The removal systems should be a simple structure.
- (2) Installation of a silt fence that absorbs radioactive materials
- Transport of radioactive materials should be blocked by installing a silt fence made of absorption materials mentioned above in (1) inside the harbor.