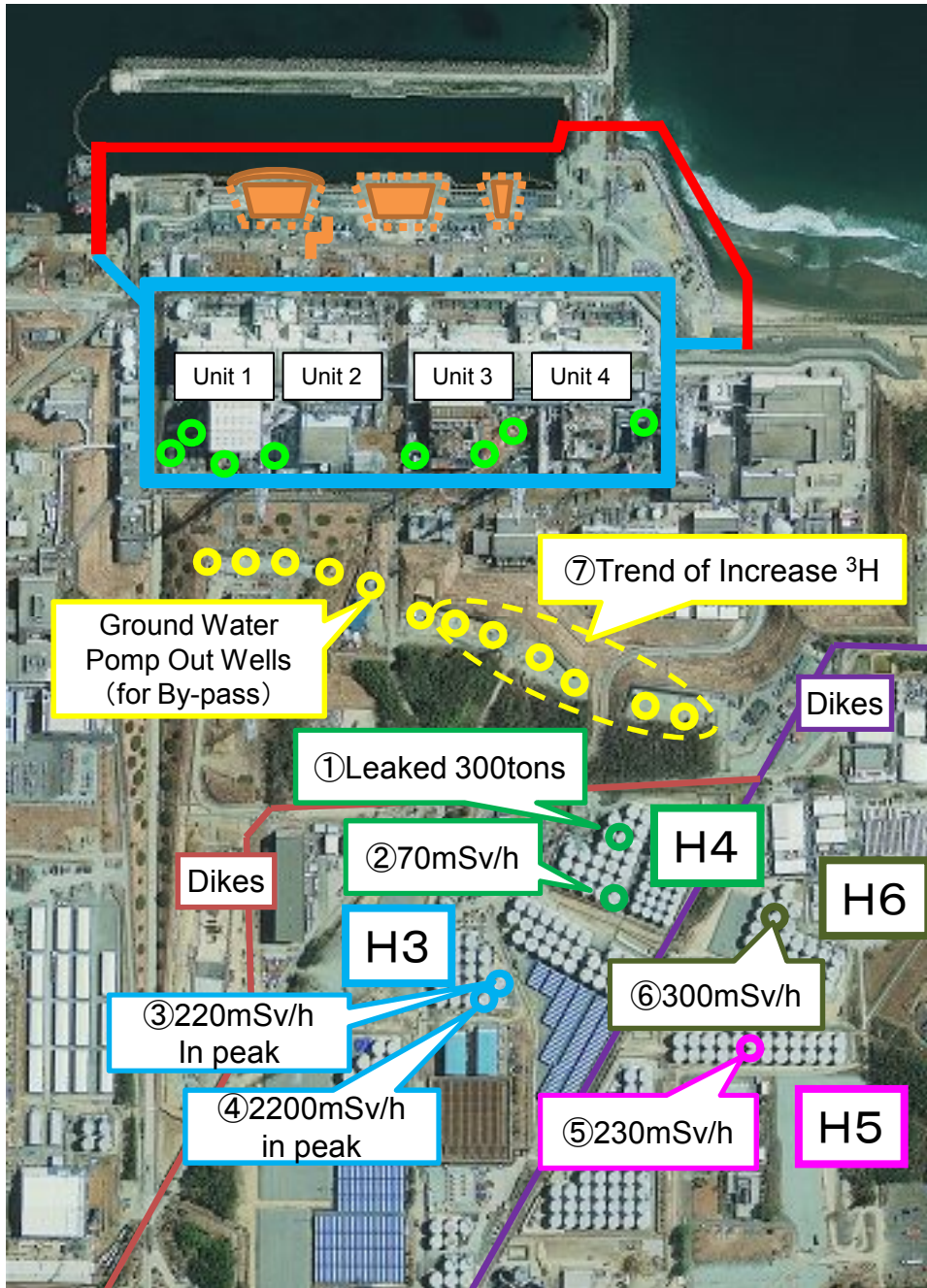


# Leakage of Contaminated Water from Tanks and Countermeasures



1. **Enhance the management of tanks and surrounding area** (Direction on Aug.26+Basic Policy(6.) on Sep.3)  
("normally closed" use of drain valves, Reinforce tank bottoms by concrete, Install level gauges and leak detectors, Install centralized annunciators)
2. **Reinforce patrol** (Increase patrols around tanks from twice to four times a day, Improve patrol procedures to record details such as air dose rate, etc.)
3. **Accelerate construction of welded joint tanks and replace bolted joint tanks**
4. **Accelerate treatment of contaminated water** (Start ALPS operation in order from Sep.) and **reduce air dose rate by removing contaminated soil**
5. **Identify any potential risks related to storage of highly-contaminated water and prepare its countermeasure**
6. **Strengthen regular monitoring activities in the sea area and on dikes into which contaminated water from leaking tanks or piping may flow**

## Leakage of Contaminated Water from Tanks (figures show $\beta$ dose)

### 【H4 Tank Zone】

- ① **300tons of contaminated water leaked** from Tank No.5 (**found Aug.19**). Spread beyond leak barrier through a rain drain valve.
- ② **70mSv/h detected** at the bottom plate joint of Tank No.6 (**Aug.31**).

### 【H3 Tank Zone】

- ③ **70mSv/h detected** at the bottom plate joint of Tank No.6 (**Aug.31**). The same part indicated **220mSv/h (Aug.31)**, **80mSv/h (Sep.1)**.
- ④ **1800mSv/h\* peak detected** at the southern side bottom plate of Tank No.4 (**Aug.31**) Northern side bottom plate indicated **2200mSv/h peak (Sep.3)**.

### 【H5 Tank Zone】

- ⑤ **230mSv/h detected** at the ground under connection pipe Tank No.5-No.6 (**Aug.31**).

### 【H6 Tank Zone】

- ⑥ **300mSv/h detected** at bottom plate joint of Tank No.7 (**Sep.3**).

※Related to above ①~⑥, possibility of leaked water flowing into the sea through the dikes is considered as unlikely because the dose rates of them stay relatively low.

### 【Ground water pump out well for by-pass】

- ⑦ **Trends of increase of tritium showed** Well 7: 30(Mar.), 470(Aug.), Well 11: 57(Feb.), 300(Aug.), Well 12: 450(Feb.), 900(Aug.) (Unit; Bq/L). Rf. plant operational limit 60,000Bq/L.

\* "1800mSv/h" is a value of "equivalent dose" which was measured for evaluating the effects of external exposure. In actual measurement,  $\gamma$  rays consists 1mSv/h out of 1800mSv/h, and the rest consists  $\beta$  rays, therefore its influence to human body is limited. Whereas, the annual dose limits for workers, "50mSv/y" is "effective dose", thus, "1800mSv/h" and "50mSv" are not comparable.