

Current progress in the investigation of the H4 Area water leakage

Aug 24, 2013

Tokyo Electric Power Company



東京電力

Brief summary (1)

- We are investigating thoroughly the cause of the water leakage from the No.5 tank in the H4 area on August 19.
- During investigation of the tank, we discovered the below facts:
 - Three tanks, including the No.5 tank in the H4 area, were first installed in the H1 area.
 - As the ground level of the tanks' substructures had sunk, they were planned to be installed in the H2 area. However, they were eventually installed in the H4 area.
- Currently, the causal connection between the water leakage from the No.5 tank and the fact that the tank had been installed on the sunken substructure is unclear.

Brief summary (2)

●Timeline

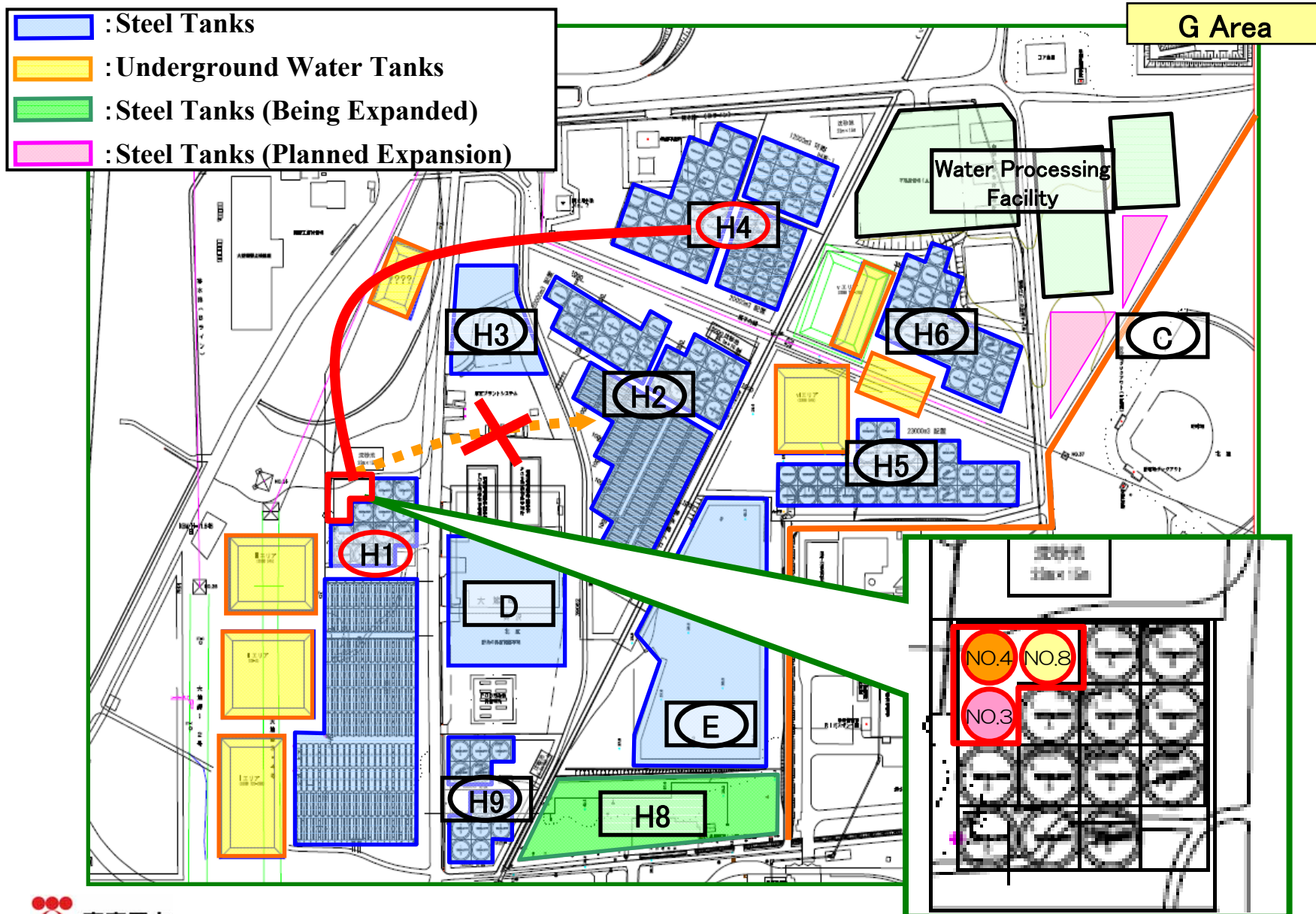
In 2012

- **Jun 16**, Start of installation of the vertical cylindrical steel tanks (capacity of each is 1000m³) in the H1 area
- **Jul 19**, While filling three tanks with water as a test, their substructures partially sank by approx. 20cm at the north-east of the H4 area
- **Late-Jul to early-Aug**, Completed the ground improvement in the H4 area
- **Early-Aug**, Broke up and transferred the three tanks
- **Aug**, Received a report from a prime contractor stating that no impact on the three tanks had been found due to the H1 ground's sinking
- **Aug 25**, Completed installation of the No.7, 8 and 9 tanks in the H2 area and filled the tanks with water
- **Mid-Sep to mid-Nov**, Installed 22 tanks (capacity of each is 1000m³) in the H4 area
- **Sep 17 to 22**, Installed the No.10 tank (previously No.3 in the H1 area) in the H4 area
- **Oct 5**, Filled the No.10 tank with water as a test and found no problems
- **Sep 22 to 26**, Installed the No.5 tank (previously No.4 in the H1 area) in the H4 area
- **Oct 7**, Filled the No.5 tank with water as a test and found no problems
- **Sep 27 to 30**, Installed the No.3 tank (previously No.8 in the H1 area) in the H4 area
- **Oct 12**, Filled the No.3 tank with water as a test and found no problems
- **Oct 21**, Start of operation of the No.5 and No.10 tanks in the H4 area
- **Oct 24**, Start of operation of the No.3 tank in the H4 area

In 2013

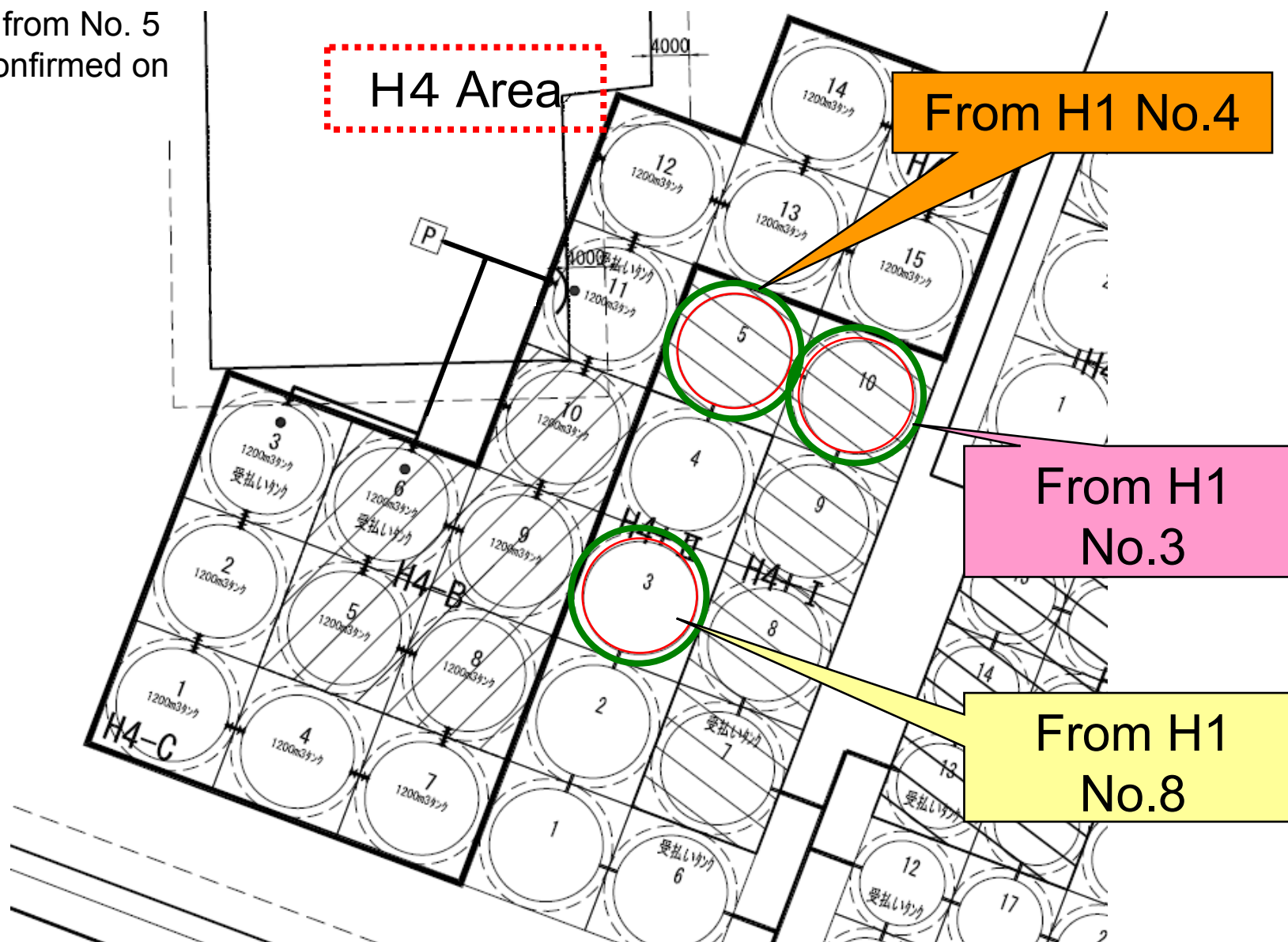
- **Aug 19**, Discovered the water leakage from the No.5 tank in the H4 area
- **Aug 24**, After investigating our internal documents, confirmed that the No.3, 5 and 10 tanks in the H4 area had been installed in the H1 area.

Location of Tank Areas

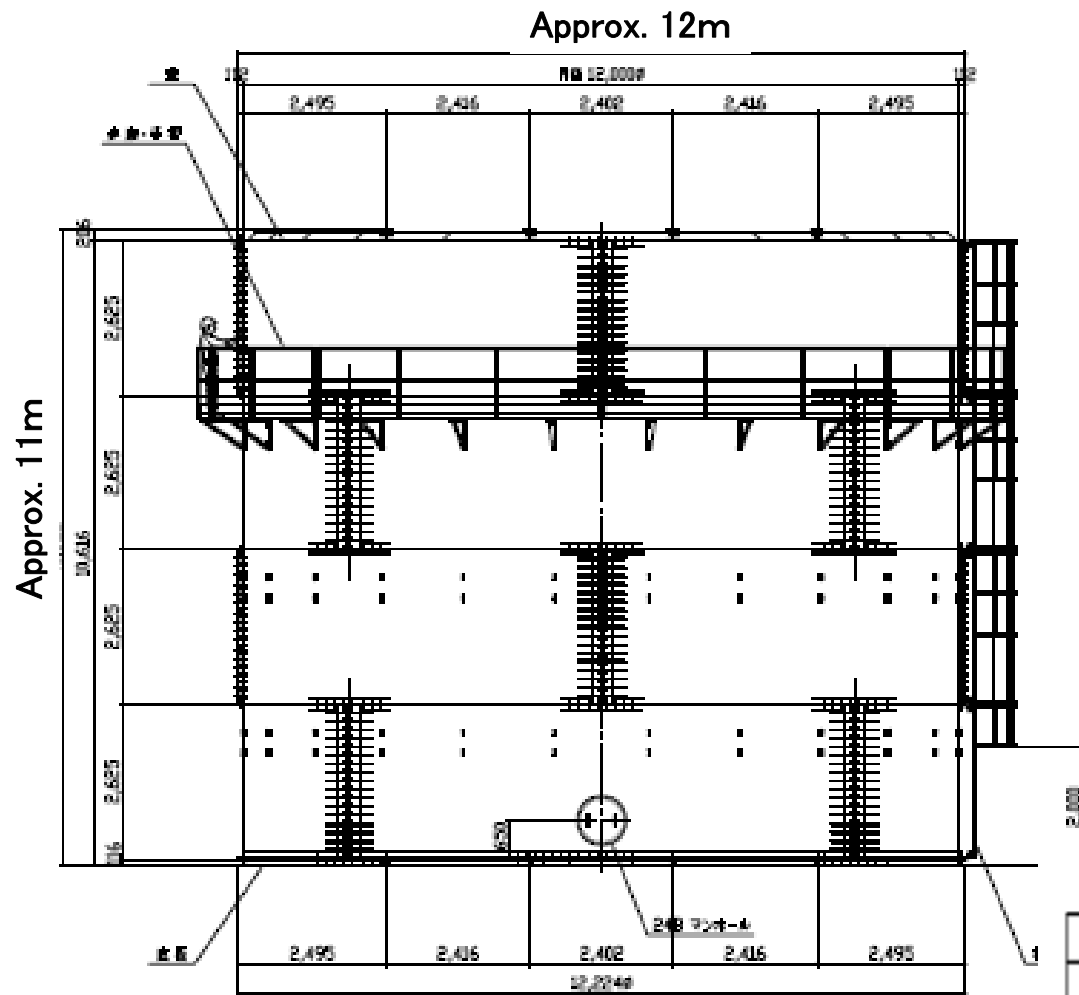


Location of Tanks moved from H1 Area to H4 Area

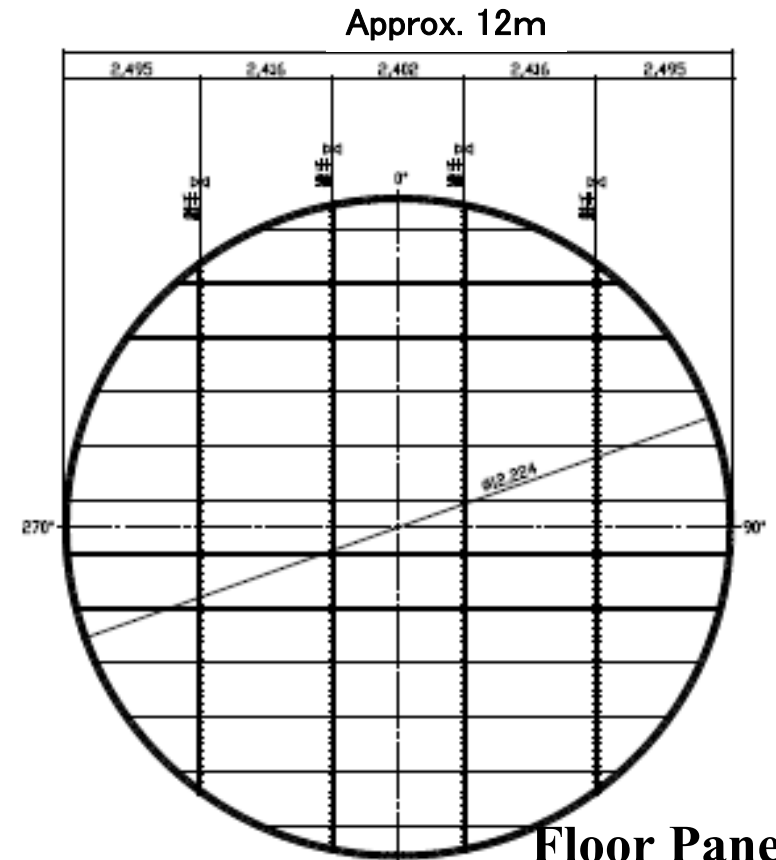
● Leakage from No. 5 Tank was confirmed on August 19.



Tank Structure



Overall View



Floor Panel

Specification of the tank material (Japanese)

種別	詳細	
鋼板 (側板)	材質: SS400	板厚 t: 12 mm
鋼板 (底板)	材質: SS400	板厚 t: 16 mm
鋼板 (蓋板)	材質: SS400	板厚 t: 6 mm
外面塗装 (下塗り)	グリーンポーセイ	
外面塗装 (上塗り)	タイコーペイントDXMA	
内面塗装	エポタールB0エポ	

Confirmed Outer Appearance



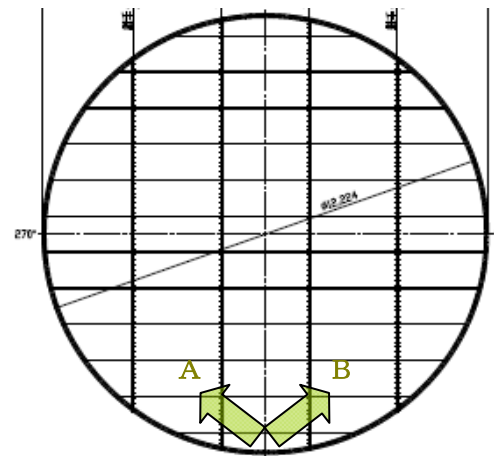
Outer Appearance (Direction A)



Outer Appearance (Direction B)



Enlarged Outer
Appearance



From Manhole

Groundwork of H1 Area



Photographed in
July 2013

Measures from now on

1. Measures to reduce leakage risk

- Begin moving water from the No.3 and No.10 tanks in the H4 Area to other tanks with vacant capacity within the H4 area, as soon as preparations are complete tomorrow.

2. Fully comprehend the issues

- Implement internal audit by our Internal Audit & Management of Quality & Safety Department.