

# Fukushima Daiichi Nuclear Power Station

## Completion of the Second Discharge of ALPS Treated Water in FY2026

- The Second discharge of ALPS treated water in FY2026 began at 11:28 a.m. on June 1.
  - In order to ensure that the ALPS treated water (tritium) is properly diluted every day during the discharge period, we have analyzed the tritium concentration in the water after dilution with seawater and confirmed that the analysis values are approximately equal to calculated concentrations, and below 1,500Bq/liter.
  - During the discharge period, seawater samples have also been taken from 10 locations within 3km of the power station and 4 locations within 10km square in front of the power station, and the detection limit has been raised to approximately 10Bq/liter in order to quickly obtain tritium concentration measurement results. As a result, we have confirmed that the analysis values are below both the discharge suspension level (700 Bq/liter\*<sup>1</sup> or 30 Bq/liter\*<sup>2</sup>) and the investigation level (350 Bq/liter\*<sup>1</sup> or 20 Bq/liter\*<sup>2</sup>).
- \*1 10 locations within 3 km of the power station    \*2 4 locations within 10 km square in front of the power station
- During the period of discharge of ALPS treated water, the discharge was temporarily suspended twice as described below. However, after confirming on-site conditions, the discharge was resumed. In all cases, the pre-designed safety functions operated properly, and no ALPS treated water that failed to meet the standards was released into the sea, and there has been no impact on the environment.
    - On June 10, an “abnormality in the transfer process” alarm was triggered, resulting in an automatic suspension. After replacing the motor-operated valve considered to be the cause and confirming that there were no issues with the facilities, operations resumed on June 11.
    - On June 13, an “abnormality in the transfer process” alarm was triggered, resulting an automatic suspension. Due to the impact of a lightning strike(presumed), the transmission line was momentarily interrupted, resulting in a temporary decrease in the flow rate of the “seawater transfer pump,” which in turn caused the emergency isolation valve-2 to close. After confirming that there were no issues with the equipment, operations were resumed on the same day.

< Announced by June 21, 2026 >

- We completed the discharge of the ALPS treated water from the measurement/confirmation facility tank group B at 12:58 a.m. on June 20. The flush out of the water remaining in the ALPS treated water transfer line (ALPS treated water) was completed at 12:03 p.m. on June 20, and the completion of this task marked the end of the Second discharge of ALPS treated water in FY2026. (Total amount of water discharged: approx. 7,927 m<sup>3</sup>, Total amount of tritium discharged: Approx. 1.3 T Bq)
- Going forward, we will remain vigilant to ensure the safe and stable discharge of ALPS treated water.

# [Reference] FY2026 ALPS treated water discharge plan (1/2)



- The FY2026 ALPS treated water discharge plan is as follows. There will be eight discharges during the year with an annual discharge of approximately 62,400m<sup>3</sup>. The annual tritium discharge volume will be approximately 11 T Bq. In addition, there may be slight differences between the planned and actual annual tritium discharge amounts due to factors such as differences in the analytical values at the source tank group and the measurement/confirmation tank group.

Management number※1	Transfer source tank※2	Amount of water to be transferred※3	Discharge commencement period (Discharge volume)
26-1-19	H2 area Group J (Transferred to Measurement/Confirmation facility Group A) : <u>Approx. 7,390m<sup>3</sup></u> H1 East area Group C (Transferred to Measurement/Confirmation facility Group A) : <u>Approx. 390m<sup>3</sup></u>	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.51 - 0.86 ※4 Tritium concentration: 150,000~250,000 Bq/L ※5 Total amount of tritium : 1.9 T Bq	April (7,800m <sup>3</sup> )
26-2-20	H1 East area Group C (Transferred to Measurement/Confirmation facility Group B) : Approx.7,800m <sup>3</sup>	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.51 - 0.86 ※4 Tritium concentration: 150,000 Bq/L ※5 Total amount of tritium : 1.2 T Bq	May~June (7,800m <sup>3</sup> )
26-3-21	H1 East area Group C (Transferred to Measurement/Confirmation facility Group A) : Approx. 3,700m <sup>3</sup> H1 East area Groups A/B (Transferred to Measurement/Confirmation facility Group A) : Approx. 4,100m <sup>3</sup>	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.51 - 0.86 ※4 Tritium concentration: 150,000~160,000 Bq/L ※5 Total amount of tritium : 1.2 T Bq	June~July (7,800m <sup>3</sup> )
26-4-22	H1 East area Groups A/B (Transferred to Measurement/Confirmation facility Group C) : Approx. 7,800m <sup>3</sup>	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.60 - 0.84 ※4 Tritium concentration: 160,000 Bq/L ※5 Total amount of tritium : 1.3 T Bq	July~August (7,800m <sup>3</sup> )

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※1 The management number is made up of the fiscal year, followed by the discharge number for that fiscal year, and the total number of discharges to date.

For example, "26-1-19" indicates that the data is for the first discharge of FY2026, which is the nineteenth discharge to date.

※2 The tank order from which water will be transferred will not be impacted by increases/decreases in the transfer volume (factual measurements). But order of discharge may be moved forward or backward.

※3 The underlined sections indicate actual values.

※4 Conservative values calculated from the analytical values of the seven major nuclides (Cs-134, Cs-137, Sr-90, I-129, Co-60, Sb-125, Ru-106) measured after ALPS treatment and storage in tanks, plus the maximum value of C-14 (0.11) or analytical value and an estimate of the total of other nuclides at 0.3. For H1 East-A, B, C and H2-B, the notification concentration ratio calculated from the analytical values of the seven major nuclides is added to the maximum value of C-14 (0.11) or analytical value, and the analytical values of other nuclides (values obtained by analyzing samples obtained by mixing water samples taken from each tank in each tank group).

※5 Average value of the tank group that was assessed taking into account the radioactive decay until April 1, 2026

# [Reference] FY2026 ALPS treated water discharge plan (2/2)



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Management number ※1	Transfer source tank ※2	Amount of water to be transferred	Discharge commencement period (Discharge volume)
26-5-23	H1 East area Groups A/B H2 area Group B	(Transferred to Measurement/Confirmation facility Group B) : Approx. 4,800m <sup>3</sup> (Transferred to Measurement/Confirmation facility Group B) : Approx. 3,000m <sup>3</sup>	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.32 - 0.84 ※3 Tritium concentration: 160,000~170,000 Bq/L ※4 Total amount of tritium : 1.3 T Bq August~ September (7,800m <sup>3</sup> )
26-6-24	H2 area Group B K1 area Groups C/D	(Transferred to Measurement/Confirmation facility Group A) : Approx. 6,200m <sup>3</sup> (Transferred to Measurement/Confirmation facility Group A) : Approx. 1,600m <sup>3</sup>	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.32 - 0.84 ※3 Tritium concentration: 150,000~190,000 Bq/L ※4 Total amount of tritium : 1.3 T Bq September~ October (7,800m <sup>3</sup> )
26-7-25	K1 area Groups C/D	(Transferred to Measurement/Confirmation facility Group C) : Approx. 7,800m <sup>3</sup>	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.35 - 0.40 ※3 Tritium concentration: 190,000 Bq/L ※4 Total amount of tritium : 1.5 T Bq October~ November (7,800m <sup>3</sup> )
Inspection suspension (including full inspections of measurement/confirmation facility Group A)			
26-8-26	K1 area Groups C/D G4 South area Group C	(Transferred to Measurement/Confirmation facility Group B) : Approx. 1,900m <sup>3</sup> (Transferred to Measurement/Confirmation facility Group B) : Approx. 5,900m <sup>3</sup>	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.35 - 0.50 ※3 Tritium concentration: 190,000 Bq/L ※4 Total amount of tritium : 1.5 T Bq February ~March (7,800m <sup>3</sup> )

➡ Total amount of tritium to be discharged during FY2026 : Approx. 11 T Bq

※1 The management number is made up of the fiscal year, followed by the discharge number for that fiscal year, and the total number of discharges to date.  
For example, "26-1-19" indicates that the data is for the first discharge of FY2026, which is the nineteenth discharge to date.

※2 The tank order from which water will be transferred will not be impacted by increases/decreases in the transfer volume (factual measurements). But order of discharge may be moved forward or backward.

※3 Conservative values calculated from the analytical values of the seven major nuclides (Cs-134, Cs-137, Sr-90, I-129, Co-60, Sb-125, Ru-106) measured after ALPS treatment and storage in tanks, plus the maximum value of C-14 (0.11) or analytical value and an estimate of the total of other nuclides at 0.3. For H1 East-A, B, C and H2-B, the notification concentration ratio calculated from the analytical values of the seven major nuclides is added to the maximum value of C-14 (0.11) or analytical value, and the analytical values of other nuclides (values obtained by analyzing samples obtained by mixing water samples taken from each tank in each tank group).

※4 Average value of the tank group that was assessed taking into account the radioactive decay until April 1, 2026.

# [Reference] Measurement monitoring plan for obtaining quick results **TEPCO**

- Since the commencement of ALPS-treated water discharge into the sea in August 2023, TEPCO has engaged in monitoring to obtain quick measurements of the concentration of tritium in seawater at 14 locations shown in the diagrams below (Upper detection limit: Approximately 10Bq/liter). The discharge is immediately suspended if any of the values exceed the discharge suspension level (noted in the diagrams)

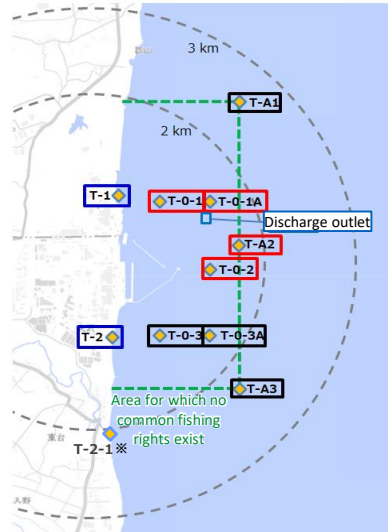


Figure 1: Specimen sampling locations within 3km of the power station (near the discharge outlet)

 
 
  : Monitoring points used to obtain quick results (10 locations)  
**Indicator (Discharge suspension level) 700Bq/liter**

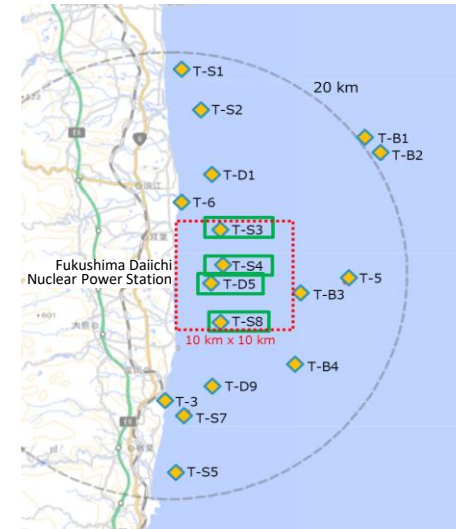


Figure 2: Specimen sampling locations within a 10km square in front of the power station

  : Monitoring points used to obtain quick results (4 locations)  
**Indicator (Discharge suspension level) 30Bq/liter**

	【Fig.1】 Within a 3km of the power station (near the discharge outlet)		【Fig. 2】 Four locations within a 10km square in front of the power station <span style="border: 1px solid green; padding: 2px;"> </span>
	Four locations in the vicinity of the discharge outlet <span style="border: 1px solid red; padding: 2px;"> </span>	Other six locations <span style="border: 1px solid blue; padding: 2px;"> </span> <span style="border: 1px solid black; padding: 2px;"> </span>	
During the discharge period and for one week after the completion of discharge	Daily <sup>※1</sup>	Twice a week <sup>※2</sup>	T-D5: Once a week T-S3, T-S4, T-S8: Once a month
During the discharge suspension period (Excluding the week following the completion of discharge)	Once a week <sup>※2</sup>	Once a month <sup>※2</sup>	

※1 If bad weather during the discharge period prevents measurements for being taken for two consecutive days, on the following day (third day) if it is again expected that measurements cannot be taken, measured results will be quickly obtained from T-1 and T-2.

※2 We have engaged in monitoring daily since the commencement of discharge in August 2023, but the monitoring plan was changed on December 26, 2023 in light of actual measurements taken during discharge ([Announced on December 25, 2023](#))