

Fukushima Daiichi Nuclear Power Station

Commencement of the Discharge of ALPS Treated Water into the Sea

(Fourth Discharge in FY2026)

<Reference document>
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Fukushima Daiichi Decontamination and
Decommissioning Engineering Company

- Transfer of ALPS treated water from H1 East area Group A/B to measurement/confirmation facility tank group C was completed on June 4, 2026, in preparation for the Fourth discharge of FY2026. (Actual transfer volume: 7,770 m³)
- We have confirmed that analysis results of the samples taken on June 22, 2026 for the tank group C at the measurement/confirmation facility, including analysis by external agencies, have met government's regulatory standards.
- During the discharges so far, we have taken samples from the seawater pipe every day to measure tritium concentration in order to confirm that tritium is being suitably diluted. As a result, we have been able to confirm that the analysis values are approximately equal to the calculated concentrations, and less than 1,500 Bq/liter.
- Moreover, seawater samples have also been taken from 10 locations within 3 km and 4 locations within a 10 km square in front of the power station, and the detection limit has been raised to approximately 10 Bq/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*¹ or 30 Bq/liter*²) and the investigation level (350 Bq/liter*¹ or 20 Bq/liter*²). (Refer to page 5)

*1 10 locations within 3 km of the power station

*2 4 locations within a 10 km square in front of the power station

<Announced by July 28, 2026>

- Today, we commenced the discharge of ALPS treated water at 11:28 a.m. (planned term of discharge: July 30, 2026 to August 17, 2026, planned total amount of water to be discharged: approx. 7,800 m³, planned tritium discharge volume: approx. 1.3 T Bq)
- Tritium concentration after dilution at this discharge is approximately 230 Bq/liter, which is well below the regulatory concentration limit (60,000 Bq/liter), WHO standard for drinking water quality guidelines (10,000 Bq/liter), and value stipulated in the government policy (1,500 Bq/liter).
- Going forward, we will remain vigilant to ensure the safe and stable discharge of ALPS treated water into the sea.

[Reference] Outline of the Fourth discharge in FY2026

Outline of discharge for group: K4-C

Attributes of the treated water	Concentration of the 29 types of radionuclides (excluding tritium) in scope of measurement/assessment	Within regulatory requirements (sum of the ratios of legally required concentrations of radioactive substances is less than 1) (sum of the ratios of concentration: 0.61) (details on P.1 of the link)	
	Tritium concentration	17 x 10 ⁴ Bq/liter (details on P.2 of the link)	
	Concentration of the 39 significant types of radionuclides measured voluntarily	No significant radionuclides identified (details on P.3 of the link)	
	Status of water quality assessment	Within government and prefectural requirements (details on P.4 of the link)	
	Water temperature	Same as outdoor temperature After diluted to 740 times (design dilution factor), same as sea water temperature (not the same as plant's thermal discharge)	
Planned volume of treated water discharge		Approximately 7,800 m ³	
Treated water flow rate		Approximately 460m ³ /day (set not to exceed designed maximum on 500m ³ /day)	
Dilution sea water flow rate		Approximately 340,000 m ³ /day (same speed as walking in the tunnel [approximated 1m/second])	
Planned volume of tritium discharge		Approximately 1.3 T Bq	
Concentration of tritium after dilution		Approximately 230 Bq/liter	
Planned term of discharge		July 30, 2026 – August 17, 2026	

[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 62,400m³. 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 H1 East area Group C	(Transferred to Measurement/Confirmation facility Group A) : <u>Approx. 7,390m³</u> (Transferred to Measurement/Confirmation facility Group A) : <u>Approx. 390m³</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
26-2-20	H1 East area Group C	(Transferred to Measurement/Confirmation facility Group B) : Approx. 7,800m ³	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
26-3-21	H1 East area Group C H1 East area Groups A/B	(Transferred to Measurement/Confirmation facility Group A) : Approx. 3,700m ³ (Transferred to Measurement/Confirmation facility Group A) : Approx. 4,100m ³	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
26-4-22	H1 East area Groups A/B	(Transferred to Measurement/Confirmation facility Group C) : Approx. 7,800m ³	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

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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)

TEPCO

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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 ³ (Transferred to Measurement/Confirmation facility Group B) : Approx. 3,000m ³	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 (7,800m³)
26-6-24	H2 area Group B K1 area Groups C/D	(Transferred to Measurement/Confirmation facility Group A) : Approx. 6,200m ³ (Transferred to Measurement/Confirmation facility Group A) : Approx. 1,600m ³	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 (7,800m³)
26-7-25	K1 area Groups C/D	(Transferred to Measurement/Confirmation facility Group C) : Approx. 7,800m ³	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 (7,800m³)
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 ³ (Transferred to Measurement/Confirmation facility Group B) : Approx. 5,900m ³	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 (7,800m³)

➡ FY2026 total tritium discharge volume: 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

- 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)

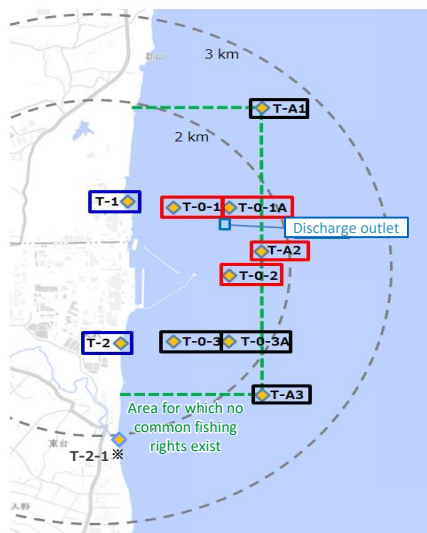


Figure 1: Specimen sampling locations within 3km of the power station (near the discharge outlet)

Red box, Blue box, Black box: Monitoring points used to obtain quick results (10 locations)
Indicator (Discharge suspension level) 700Bq/liter

※ Alternative location in the case that safety cannot be ensured at T-2.

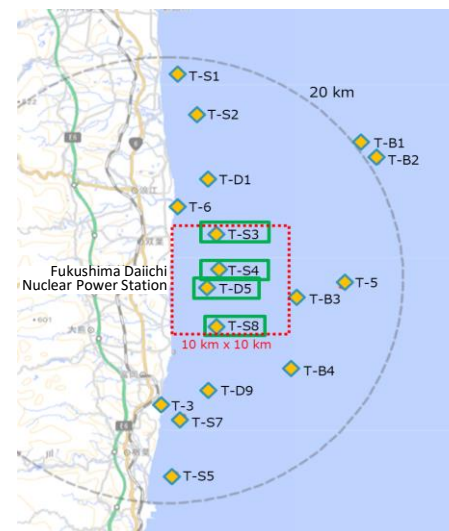


Figure 2: Specimen sampling locations within a 10km square in front of the power station

Green box: Monitoring points used to obtain quick results (4 locations)

Indicator (Discharge suspension level) 30Bq/liter

	【Fig.1】 Within 3km of the power station (near the discharge outlet)		【Fig. 2】 Four locations within a 10km square in front of the power station
	Four locations in the vicinity of the discharge outlet	Other six locations	
During the discharge period and for one week after the completion of discharge	Daily※ ¹	Twice a week※ ²	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※ ²	Once a month※ ²	

※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](#))