ALPS Treated Water Discharge Status Update

May 29, 2025

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Tokyo Electric Power Company Holdings, Inc.

Report contents

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   (Management number* : 25-1-12)

4. Status of the dismantling of the J9 area tanks

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(Reference) Sea area monitoring history after the commencement of discharge

* 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, “25-1-12” indicates that the data is for the first discharge of 2025, which is the twelfth discharge to date.

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1. FY2024 ALPS treated water annual discharge volume

- We have confirmed that over the seven ALPS treated water discharges of FY2024, **the annual tritium discharge volume was approximately 13 trillion Bq, which is below the discharge limit of 22 trillion Bq.**
- The total radioactivity [Bq] of the nuclides targeted for measurement/assessment (30 nuclides) is as shown in the chart below which includes the estimates for nuclides detected in measurement/confirmation tank water. We also confirmed that the sum of the ratios of legally required concentrations of radionuclides was less than 1.

Nuclide	Total radioactivity [Bq]	Nuclide	Total radioactivity [Bq]	Nuclide	Total radioactivity [Bq]
C-14	6.4E+08	Cd-113m※2	－※1	Eu-155	－※1
Mn-54	－※1	Sb-125	8.8E+06	U-234	－※1
Fe-55	－※1	Te-125m	3.3E+06	U-238	－※1
Co-60	1.8E+07	I-129	3.8E+07	Np-237	－※1
Ni-63	－※1	Cs-134	－※1	Pu-238	－※1
Se-79	－※1	Cs-137	1.1E+07	Pu-239	－※1
Sr-90	4.0E+07	Ce-144	－※1	Pu-240	－※1
Y-90	4.0E+07	Pm-147	－※1	Pu-241	－※1
Tc-99	4.6E+07	Sm-151	－※1	Am-241	－※1
Ru-106	－※1	Eu-154	－※1	Cm-244	－※1

※1： Concentrations were below detectable limits (ND) so these measurements were not converted to total radioactivity [Bq]

※2： Nuclides targeted for measurement/assessment were selected after the fourth discharge of FY2024

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2-1. FY2024 Facility inspection result

- The inspection of the measurement/confirmation tank group B has been completed, and all inspections planned for FY2024 have been completed. No abnormalities that could affect the discharge schedule were found.
- In light of the inspection results, we shall continue to deliberate how to maintain the function of facilities in consideration of the long term operation until the completion of discharge.

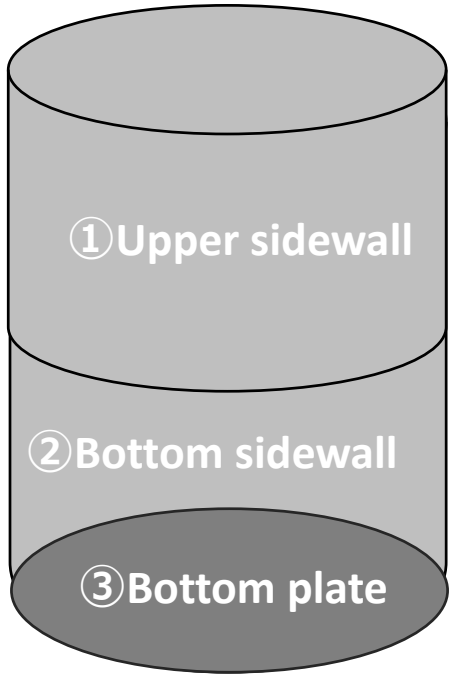
Facility	Primary inspection details	Inspection status
Measurement/ confirmation facilities	Measurement/confirmation tank group C: internal inspection of the bottom of the tanks	Completed (no abnormalities (reported on November 28, 2024))
	Measurement/confirmation tank group A: Internal inspection of the bottom of the tanks	Completed (no abnormalities (reported on December 26, 2024))
	Measurement/confirmation tank group B: Internal inspection of the tanks	Completed (reported on following pages)
	Circulation pumps: Lubrication oil for bearings replacement	Completed (no abnormalities(reported on January 30, 2025))
	Agitators: Insulation resistance measurements	Completed (no abnormalities(reported on February 27, 2025))
	Miscellaneous: Strainer cleaning, etc.	Completed (no abnormalities(reported on January 30, 2025))
Transfer facilities	ALPS treated water transfer pumps: Lubrication oil for bearings replacement	Completed (no abnormalities(reported on February 27, 2025))
	Emergency isolation valve-1: Disassembly inspection	Completed (no abnormalities(reported on February 27, 2025))
	Emergency isolation valve-2: External inspection	Completed (no abnormalities(reported on February 27, 2025))
	Miscellaneous: Strainer cleaning, etc.	Completed (no abnormalities(reported on February 27, 2025))
Dilution facilities	Seawater transfer pump system C: Disassembly inspection	Completed (no abnormalities(reported on February 27, 2025))
	Seawater transfer pump system A: Gland packing replacement	Completed (no abnormalities(reported on February 27, 2025))
	Seawater transfer pump system B: Gland packing replacement	Completed (no abnormalities(reported on February 27, 2025))
	Sea water transfer pipes/seawater pipe header: Internal inspection	Completed (no abnormalities(reported on February 27, 2025))
	Discharge vertical shaft (up-stream storage): Internal inspection	Completed (no abnormalities(reported on February 27, 2025))
Discharge facilities	Discharge vertical shaft (down-stream storage), discharge tunnel: Internal inspection	Completed (no abnormalities(reported on February 27, 2025))
Seawater intake facilities	Partitioning weirs: External inspection	Completed (no abnormalities(reported on January 30, 2025))
	Intake channel system B: Cleaning, external inspection	Completed (no abnormalities(reported on February 27, 2025))

2-2. Measurement/confirmation tank Group B inspection results

- Sealant blisters and corrosion were found during the internal inspection of measurement/confirmation tank Group B (10 tanks in total: K4-B1~B10) conducted between November 18, 2024 and April 23, 2025 but tank functions were not affected. The following steps have been taken to ensure that tank function is maintained.
  - The sidewalls and bottom of all 10 tanks were checked for sealant cracking, blistering, and rust. All rust has been removed and repaired by applying sealant.
  - Out of all 10 tanks, thinning of the metal was found in the sidewalls of one of the tanks, and corrosion was found on the manholes of two other tanks. Welding repairs were made.

	①Upper sidewall	②Bottom sidewall	③Tank bottom
Prior to reapplication of sealant			
After reapplication of sealant			

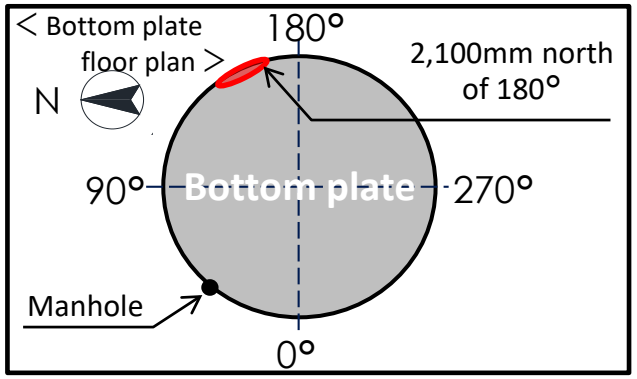
Conditions inside of the K4-B1 tank



Tank diagram

2-3. K4-B7 tank conditions

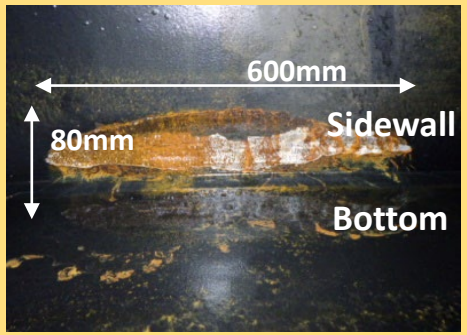
- Out of all the tanks in measurement/confirmation tank Group B, thinning of the metal caused by sealant cracking and rust was found in one tank (K4-B7)
- The results of sidewall thickness measurements and stress assessments confirmed that, as with the metal thinning discovered in tank K4 (Group E) on March 26, 2024, there is no risk of a leak during the storage of ALPS-treated water. Welding was employed to add metal and repairs were completed on April 18, 2025.
  - The thinnest area of metal was found to be 10.23mm which is above the minimum required thickness (10.2mm)
  - Furthermore, the minimum required thickness is a technical standard for sidewalls determined through the calculation of applicable standards, and indicates a problem with structural integrity if the metal is found to be below the minimum required thickness around the entire circumference of the tank (all sides). Localized corrosion (thinning) does not impact the integrity of a tank.
    【Applicable standard: Commercial nuclear power facility design/construction standard (JSME standard)】
  - A seismic stress assessment performed assuming that tank side wall thickness had thinned to half (7.5 mm) the nominal thickness (15 mm) in localized areas found that the seismic resistance margin was approximately 1.8 times the tolerance for stresses generated in concave areas.



Thickness measurements from areas of thinning

	Min	Max
Prior to repairs	10.23mm	13.61mm
After repairs	**14.27mm**	**15.02mm**

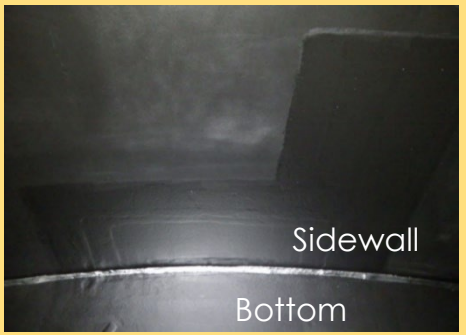
（Nominal thickness: 15mm, Required minimum thickness: 10.2mm）



① Prior to repairs

② After added welds

③ After grinding



④ After repairs

Repair process for tanks in which metal thinning was found (K4-B7)

2-4. FY2025 Facility inspection overview

- The regular inspections listed below will be carried out in FY2025 as well.
- The sixth discharge in FY2025 (management number: 25-6-17) will be conducted in parallel with the inspection of the dilution/intake facilities. Inspection of intake channel A will be conducted during the discharge, but the intake channel can isolate A and B systems, ensuring a waterway for two seawater transfer pumps required for dilution/discharge. Inspection of seawater transfer pump No. A will also be conducted during the discharge, but since there are a total of three seawater transfer pumps, the two required for dilution/discharge can be secured, so there will be no impact on the discharge plan.

Facility	Primary inspection details	Inspection status
Measurement/ confirmation facilities	Measurement/confirmation tank group C: Internal inspection of the tanks	From November 2025 to May 2026
	Circulation pumps: Disassembly inspection	From October 2025 to November 2026
	Agitators: Insulation resistance measurements	From October※1 2025 to May 2026
	Miscellaneous: Strainer cleaning, etc.	From August※1 2025 to May 2026
Transfer facilities	ALPS treated water transfer pumps: Lubrication oil for bearings replacement	From December 2025 to February 2026
	Emergency isolation valve-1: Disassembly inspection	From January 2026 to February 2026
	Emergency isolation valve-2: External inspection	From January 2026 to February 2026
	Miscellaneous: Strainer cleaning, etc.	From August※1 2025 to May 2026
Dilution facilities	Seawater transfer pump system A: Disassembly inspection	From November※2 2025 to February 2026
	Seawater transfer pump system B: Gland packing replacement	From December 2025 to February 2026
	Seawater transfer pump system C: Gland packing replacement	From December 2025 to February 2026
	Sea water transfer pipes/seawater pipe header: Internal inspection	From December 2025 to February 2026
	Discharge vertical shaft (up-stream storage): Internal inspection	From December 2025 to February 2026
Discharge facilities	Discharge vertical shaft (down-stream storage), discharge tunnel: Internal inspection	From December 2025 to February 2026
Seawater intake facilities	Partitioning weirs: External inspection	From December 2025 to February 2026
	Intake channel system A: Cleaning, Internal inspection, repair	From November※2 2025 to February 2026

※1 ：Conducted during the outage period of each system
※2 ：To be carried out in parallel with the FY2025 6th discharge

[Reference] FY2025 ALPS treated water discharge plan（1/2）

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- As of March 2025, the FY2025 discharge plan is as follows. There will be seven discharges during the year with each discharge releasing approximately 7,800m³ for an annual discharge of approximately 54,600m³. The annual tritium discharge volume will be approximately 15 trillion Bq.

Management number※1	Transfer source tank※2	Amount of water to be transferred※3		Discharge commencement period
25-1-12	G4 south area Group B（Transferred to Measurement/Confirmation facility Group A）	：Approx. 8,080m³ ※4	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.45-0.55※6 Tritium concentration: 220,000~370,000Bq/liter ※7 Total tritium volume: 2.8 trillion Bq	April
	K3 area Group A/B※5（Transferred to Measurement/Confirmation facility Group A）	：Approx. 910m³		
25-2-13	K3 area Groups A/B※5（Transferred to Measurement/Confirmation facility Group C）	：Approx.6,970m³	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.45-0.62※6 Tritium concentration: 220,000~380,000Bq/liter ※7 Total tritium volume: 1.9 trillion Bq	June-July
	J1 area Group E（Transferred to Measurement/Confirmation facility Group C）	：Approx. 820m³		
25-3-14	J1 area Group E（Transferred to Measurement/Confirmation facility Group A）	：Approx. 7,300m³	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.47-0.62※6 Tritium concentration: 200,000~380,000Bq/liter ※7 Total tritium volume: 2.9 trillion Bq	July-August
	G5 area Group E（Transferred to Measurement/Confirmation facility Group A）	：Approx. 500m³		
25-4-15	G5 area Groups E/C/B（Transferred to Measurement/Confirmation facility Group B）	：Approx. 9,000m³ ※4	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.47-0.62※6 Tritium concentration: 200,000~220,000Bq/liter ※7 Total tritium volume: 1.6 trillion Bq	September

Continues on next slide

※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, “25-1-12” indicates that the data is for the first discharge of FY2025, which is the twelfth 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 Amount of water to be transferred indicate planed values. Underlined parts are updated as actual values according to the progress of the work.

※4 Since there will be no water remaining in the receiving tanks (Measurement/Confirmation tank groups A/B) after the tank inspections, the amount of water to be transferred will total approximately 9,000m³ (discharge volume is approximately 7,800m³).

※5 K3 area Group A/B tanks emptied as a result of transfer/discharge during FY2023 and FY2024 will be reused to receive ALPS treated water.

※6 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) and an estimate of the total of other nuclides at 0.3.

※7 Tank group average, estimated taking into consideration decay as of April 1, 2025.

[Reference] FY2025 ALPS treated water discharge plan (2/2)

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Continued from previous slide

Management number※1	Transfer source tank※2	Amount of water to be transferred		Discharge commencement period
25-5-16	G5 area group A/B	(Transferred to measurement/confirmation facility Group C)	: Approx. 7,800m³	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.47-0.59※3 Tritium concentration: 220,000~260,000Bq/liter ※4 Total tritium volume: 1.9 trillion Bq	October - November
25-6-17	G5 area group A/D	(Transferred to measurement/confirmation facility Group A)	: Approx. 4,000m³	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.46-0.76※3 Tritium concentration: 260,000~300,000Bq/liter ※4 Total tritium volume: 2.2 trillion Bq	November - December
	G4 north area group A/B	(Transferred to measurement/confirmation facility Group A)	: Approx. 3,800 m³		

Inspection suspension (including full inspections of measurement/confirmation facility Group C tanks)

25-7-18	G4 north area group A/B	(Transferred to measurement/confirmation facility Group B)	: Approx. 3,700m³	Secondary treatment: None Sum of the ratios to regulatory concentrations: 0.58-0.78※3 Tritium concentration: 260,000~270,000Bq/liter ※4 Total tritium volume: 2.0 trillion Bq	March
	H2 area group J	(Transferred to measurement/confirmation facility Group B)	: Approx. 4,100 m³		

➥ FY2025 total tritium discharge volume: Approx. 15trillion Bq

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※2 Whereas the order of the tanks from which water will be transferred will not change due to increases or decreases in the amount of water transferred (actual measurements), the discharge number may be moved up or back.

※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) and an estimate of the total of other nuclides at 0.3.

※4 Tank group average, estimated taking into consideration decay as of April 1, 2025

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3. Performance of the discharge of ALPS treated water
(Management number* : 25-1-12)

4. Status of the dismantling of the J9 area tanks

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(Reference) Sea area monitoring history after the commencement of discharge

* 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, “25-1-12” indicates that the data is for the first discharge of 2025, which is the twelfth discharge to date.

Overview

- We are planning to conduct the discharge of ALPS treated water (management number: 25-1-12) as follows.
- On the next page, we will explain that there was no abnormality in parameters and sea area monitoring.

FY2024

Management number	Tank group	Tritium Concentration	Commenced	Completed	Amount of discharge	Amount of tritium radioactivity
24-1-5	Group C	19 x 10^4 Bq/liter	Apr 19, 2024	May 7, 2024	7,851m^3	Approx. 1.5 trillion Bq
24-2-6	Group A	17 x 10^4 Bq/liter	May 17, 2024	Jun 4, 2024	7,892m^3	Approx. 1.3 trillion Bq
24-3-7	Group B	17 x 10^4 Bq/liter	Jun 28, 2024	Jul 16, 2024	7,846m^3	Approx. 1.3 trillion Bq
24-4-8	Group C	20 x 10^4 Bq/liter	Aug 7, 2024	Aug 25, 2024	7,897m^3	Approx. 1.6 trillion Bq
24-5-9	Group A	28 x 10^4 Bq/liter	Sep 26, 2024	Oct 14, 2024	7,817m^3	Approx. 2.2 trillion Bq
24-6-10	Group B	31x 10^4 Bq/liter	Oct 17, 2024	Nov 4, 2024	7,837m^3	Approx. 2.4 trillion Bq
24-7-11	Group C	31x 10^4 Bq/liter	Mar 12, 2025	Mar 30, 2025	7,859m^3	Approx. 2.4 trillion Bq

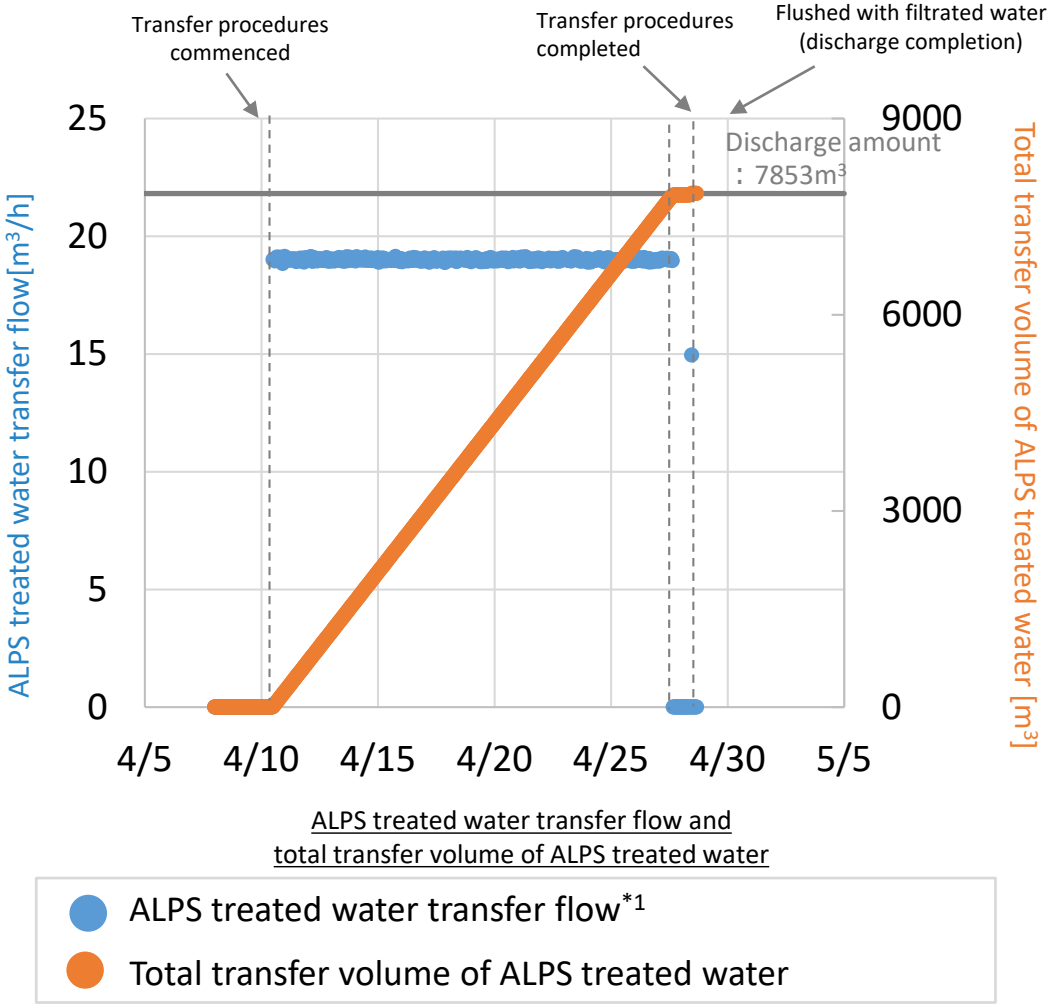
FY2025

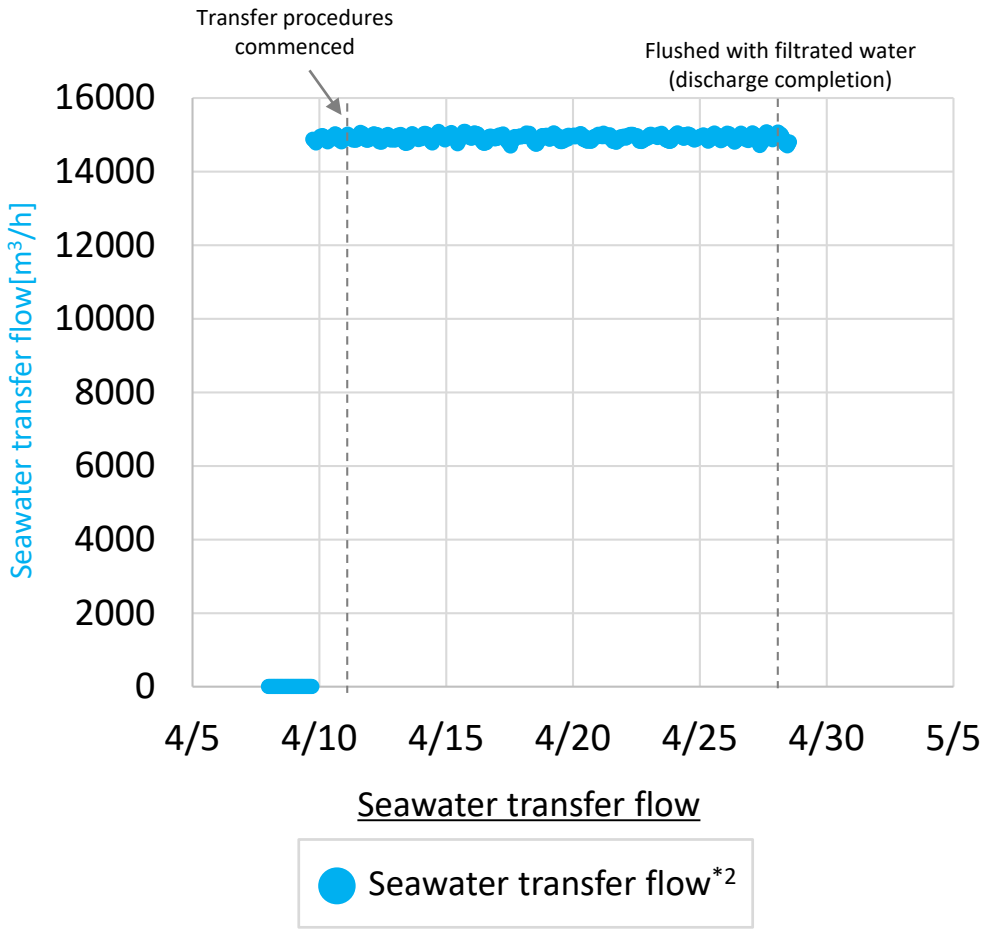
Management number	Tank group	Tritium Concentration	Commenced	Completed	Amount of discharge	Amount of tritium radioactivity
25-1-12	Group A	37x 10^4 Bq/liter	Apr 10, 2025	Apr 28, 2025	7,853m^3	Approx. 2.9 trillion Bq

*Black texts; results, Gray texts; plan

3-1. Operating parameter records during the discharge (1/3)

- We were able to operate ALPS treated water transfer systems and seawater systems without issue.

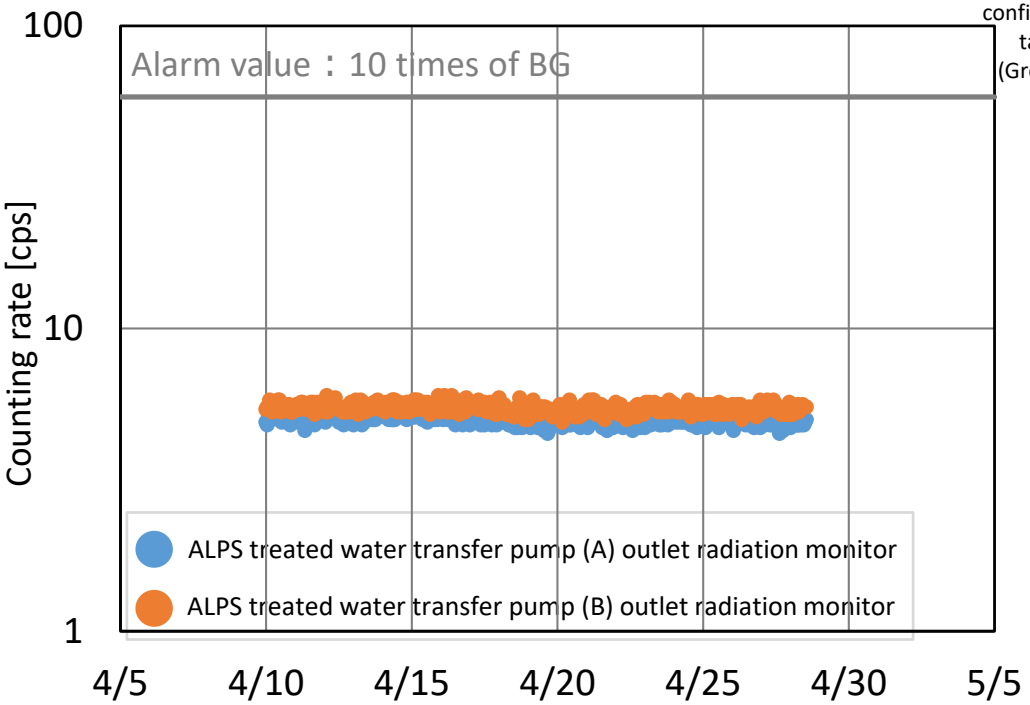




*1： The flowmeters are reduplicate, so the higher of the figures from both meters was used.
*2： Total for systems A and B

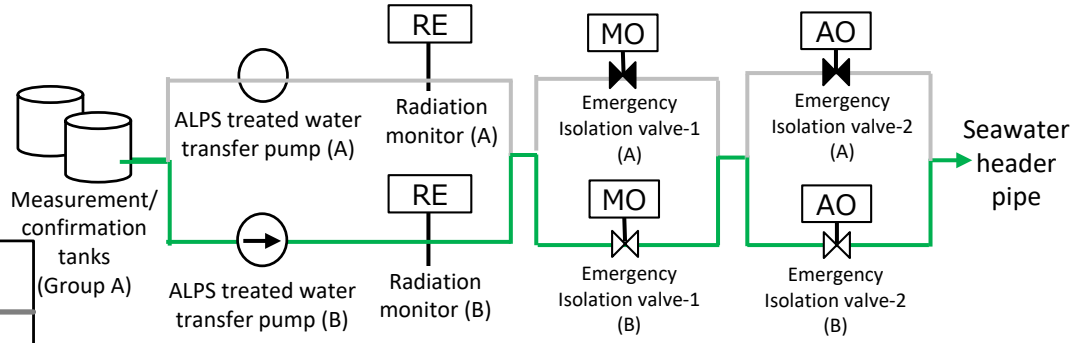
3-1. Operating parameter records during the discharge (2/3)

- No abnormalities were seen in the figures from the ALPS treated water transfer pump outlet radiation monitor.

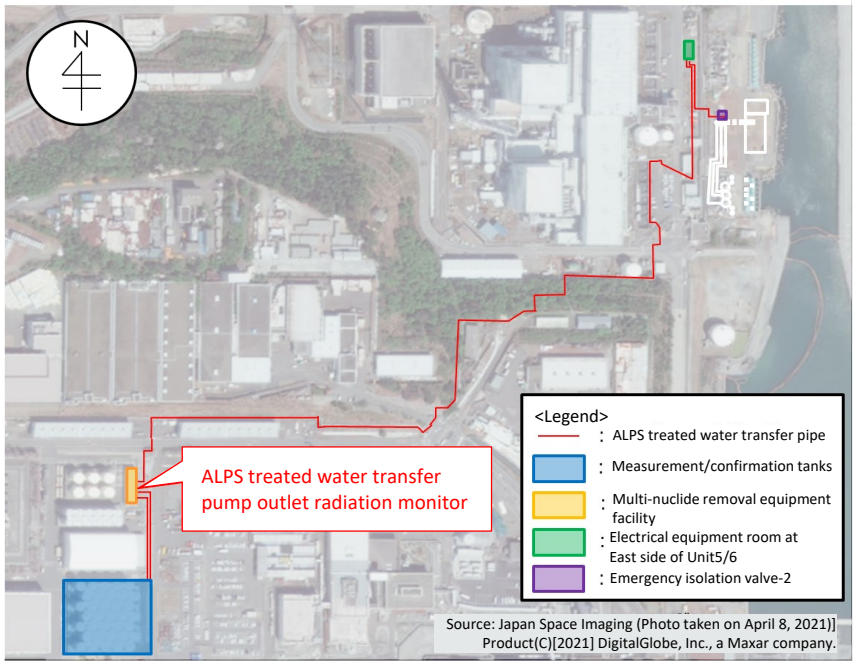


Figures of ALPS treated water transfer pump outlet radiation monitor※

※ : As shown in the schematic on the upper right, ALPS treated water was passed through System B. (System A was filled with filtrated water)



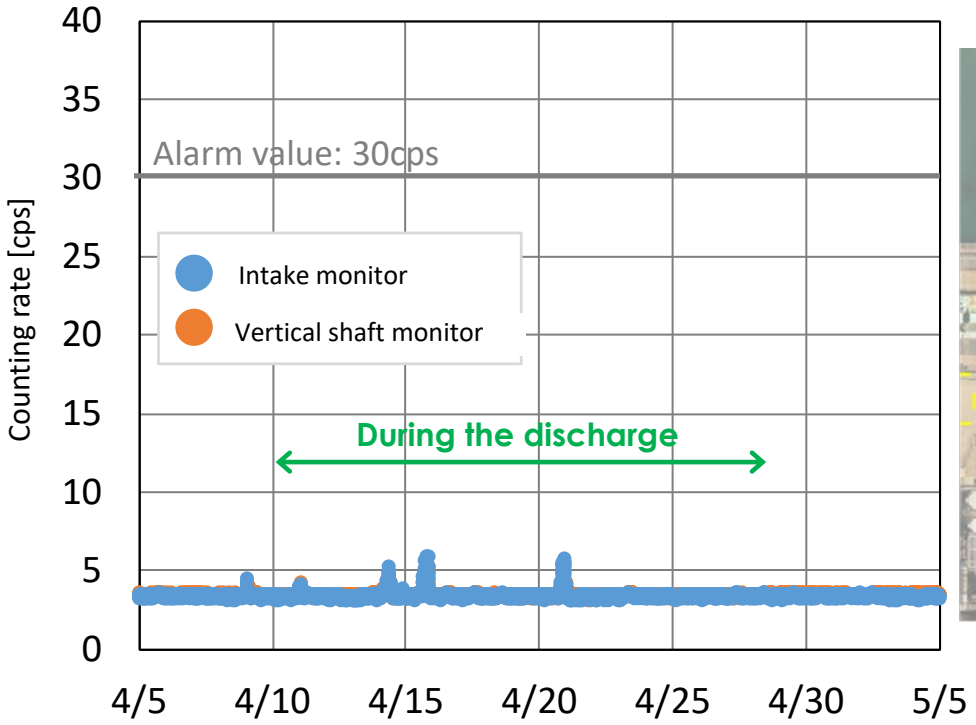
ALPS treated water transfer system schematic



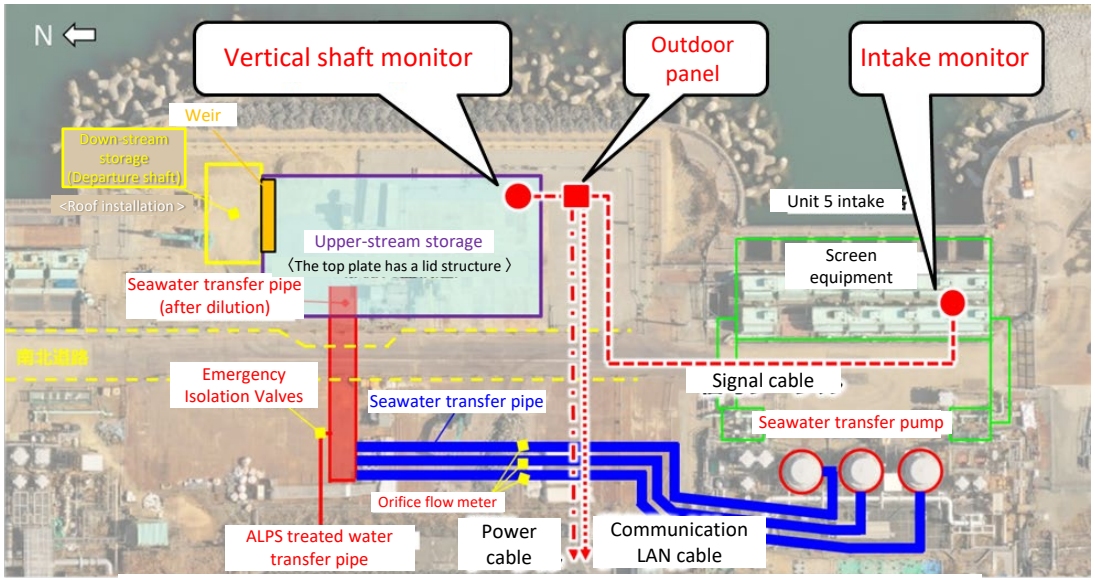
Overview of ALPS treated water dilution/discharge facility

3-1. Operating parameter records during the discharge (3/3)

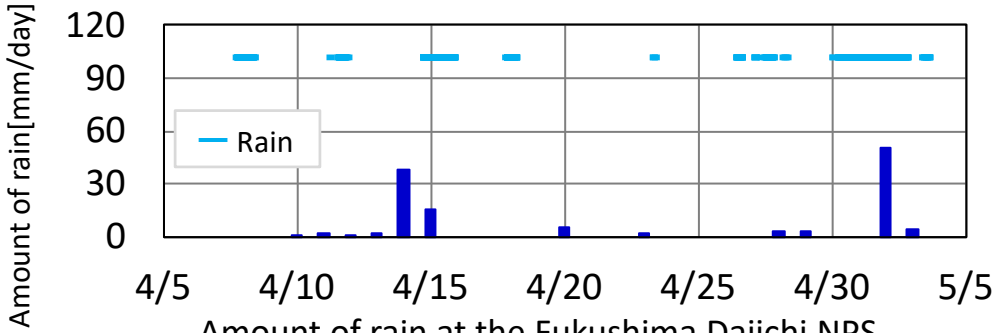
- Temporary increase in values, possibly due to rain was observed, but no abnormalities were seen in the readings.



Figures of Intake/Vertical shaft monitor



Overview of Intake/Vertical shaft monitor

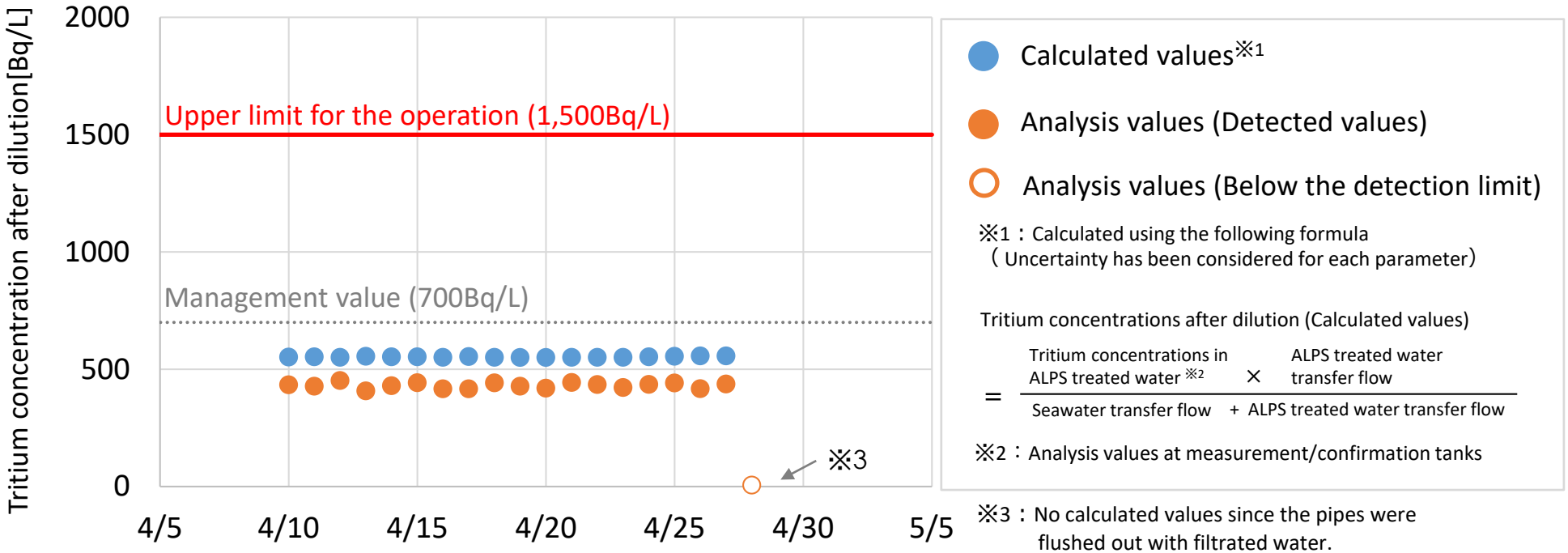


Amount of rain at the Fukushima Daiichi NPS

※It is assumed that the temporary increases during rainfall were caused by the runoff of fallout from onshore areas and precipitation of natural radionuclides (such as daughter nuclide of radon, etc.).

3-2. Tritium concentrations after dilution during the discharge

- During the discharge period, water was sampled daily from the seawater pipe to analyze tritium concentrations.
  ⇒Confirmed to be less than the upper limit for the operation: 1,500Bq/liter

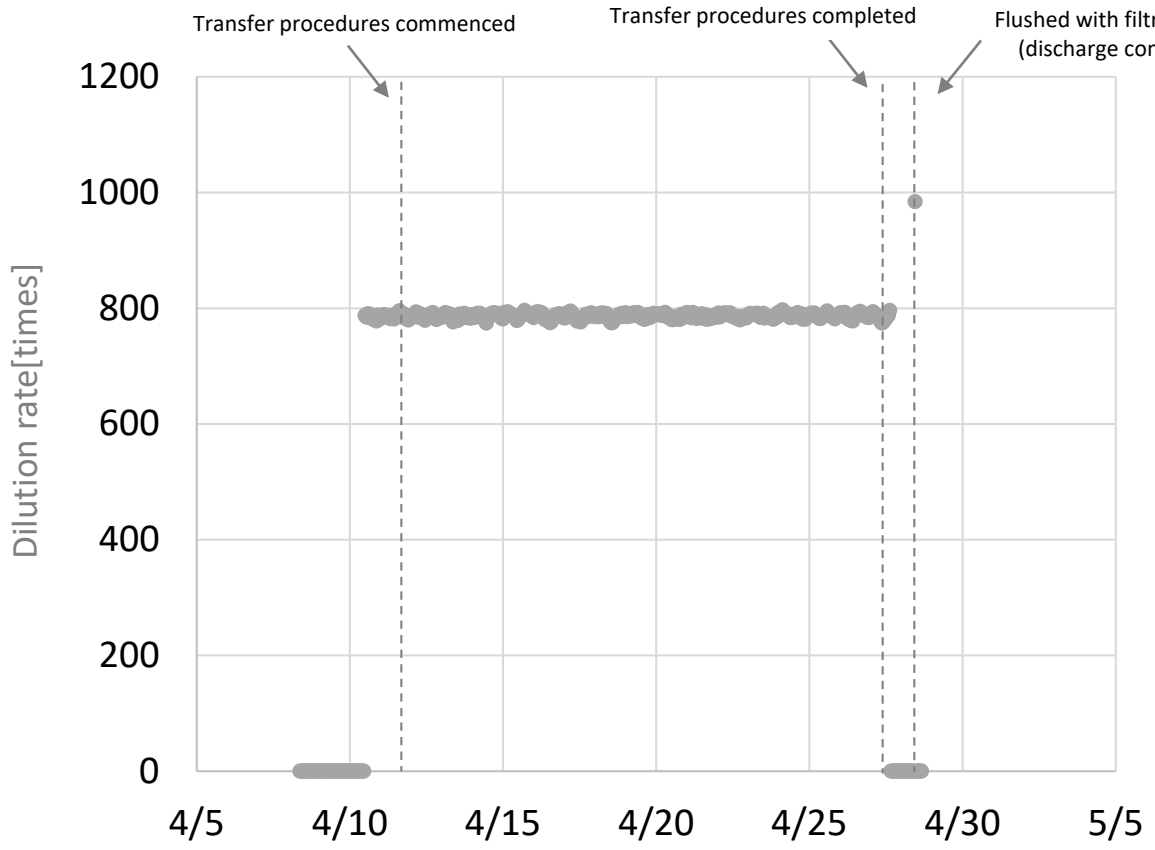


Tritium concentrations after dilution (calculated values and analysis values)

	4/10	4/11～4/27	4/28
Calculated value: Time of data acquisition	14:00	7:00	－
Analysis value: Time of specimen sampling	14:04	7:00～11:00	11:41

[Reference] Dilution rate of ALPS treated water

- The dilution rate had always been kept at over 100 times during the discharge.



Dilution rate of ALPS treated water

Dilution rate※1

$$\text{Dilution rate} = \frac{\text{Seawater flow rate}^{※2} + \text{ALPS treated water flow rate}^{※3}}{\text{ALPS treated water flow rate}^{※3}}$$

※2： Total for systems A and B
※3： The flowmeters are reduplicate, so the higher of the figures from both meters was used for calculation

3-3. Sea area monitoring history (1/3)

○ Measurement results of tritium concentrations in water sampled in the vicinity of the discharge outlet (within 3km of the power station) and outside of the vicinity of the discharge outlet (within a 10km square in front of the power station) are all below indices (discharge suspension level and investigation level).

(Unit: Bq/liter)

	Sampling location*3	Frequency	April 2025									
			20	21	22	23	24	25	26	27	28*5	29
In the vicinity of the discharge outlet	T-1	Twice a week*1	—	<5.9	—	—	<7.4	—	—	—	<6.2	—
	T-2	Twice a week*1	—	<5.9	—	—	<7.4	—	—	—	<6.2	—
	T-0-1	Once a day*2	—*4	<5.5	<7.1	—*4	<7.4	8.5	<6.3	<6.4	<7.2	<8.1
	T-0-1A	Once a day*2	—*4	<5.5	<6.3	—*4	<7.6	<5.3	<6.1	<7.5	<5.5	<8.1
	T-0-2	Once a day*2	—*4	17	<7.1	—*4	<7.4	9.8	<6.3	<6.3	<7.2	<8.1
	T-0-3A	Twice a week*1	—	<8.4	—	—	<7.6	—	—	—	<5.5	—
	T-0-3	Twice a week*1	—	<5.4	—	—	<7.6	—	—	—	<7.2	—
	T-A1	Twice a week*1	—	<8.5	—	—	<6.4	—	—	—	<5.6	—
	T-A2	Once a day*2	—*4	<8.5	<6.3	—*4	<6.3	23	<6.1	<7.6	<5.6	<8.1
	T-A3	Twice a week*1	—	<8.5	—	—	<6.4	—	—	—	<5.6	—
Outside the vicinity of the discharge outlet	T-D5	Once a week	—	<5.9	—	—	—	—	—	—	<5.6	—
	T-S3	Once a month	—	—	—	—	<6.2	—	—	—	—	—
	T-S4	Once a month	—	—	—	—	<6.2	—	—	—	—	—
	T-S8	Once a month	—	—	—	—	—	—	—	—	—	—

※: A "less than" symbol (<) indicates that the analysis result was less than the detection limit ▭ indicates that the detected value ▭ : Term of discharge of ALPS treated water (Management number: 25-1-12)

*1: Conduct twice a week during the discharge period and for once a week following the completion of discharge. Conduct once a week outside the discharge period, excluding one week following the completion of discharge
*2: Conduct once a week during the discharge period and once a week following the completion of discharge. Conduct once a month outside the discharge period, excluding one week following the completion of discharge
*3: For sampling locations, refer to "[Reference] Measurement monitoring plan"
*4: Sampling suspended due to bad weather condition
*5: Sampled before the completion of discharge at 9AM

3-3. Sea area monitoring history (2/3)

(Unit: Bq/liter)

	Sampling location[*3]	Frequency	April	May 2025								
			30	1	2	3	4	5	8	12	14	15
In the vicinity of the discharge outlet	T-1	Twice a week[*1]	—	<5.6	—	—	—	<6.8	—	—	—	—
	T-2	Twice a week[*1]	—	<5.6	—	—	—	<6.8	—	—	—	—
	T-0-1	Once a day[*2]	<7.5	<5.6	<6.6	—[*4]	<5.4	<5.4	—	<5.9	—	—
	T-0-1A	Once a day[*2]	<7.5	<7.6	<6.6	—[*4]	<5.4	<8.2	—	<6.0	—	—
	T-0-2	Once a day[*2]	<7.5	<5.6	<6.6	—[*4]	<5.4	<5.4	—	<5.9	—	—
	T-0-3A	Twice a week[*1]	—	<7.5	—	—	—	<8.2	—	—	—	—
	T-0-3	Twice a week[*1]	—	<7.5	—	—	—	<5.4	—	—	—	—
	T-A1	Twice a week[*1]	—	<6.4	—	—	—	<6.9	—	—	—	—
	T-A2	Once a day[*2]	<7.5	<6.4	<6.6	—[*4]	<5.4	<6.8	—	<7.6	—	—
	T-A3	Twice a week[*1]	—	<6.4	—	—	—	<6.8	—	—	—	—
Outside the vicinity of the discharge outlet	T-D5	Once a week	—	—	—	—	—	<8.2	—	<7.7	—	—
	T-S3	Once a month	—	—	—	—	—	—	—	—	<6.7	—
	T-S4	Once a month	—	—	—	—	—	—	—	—	<6.7	—
	T-S8	Once a month	—	—	—	—	—	—	<7.1	—	—	<7.3

※: A “less than” symbol (<) indicates that the analysis result was less than the detection limit ☐ indicates that the detected value

*1: Conduct twice a week during the discharge period and for once a week following the completion of discharge. Conduct once a week outside the discharge period, excluding one week following the completion of discharge
*2: Conduct once a week during the discharge period and once a week following the completion of discharge. Conduct once a month outside the discharge period, excluding one week following the completion of discharge
*3: For sampling locations, refer to “[Reference] Measurement monitoring plan”
*4: Sampling suspended due to bad weather condition

3-3. Sea area monitoring history (3/3)

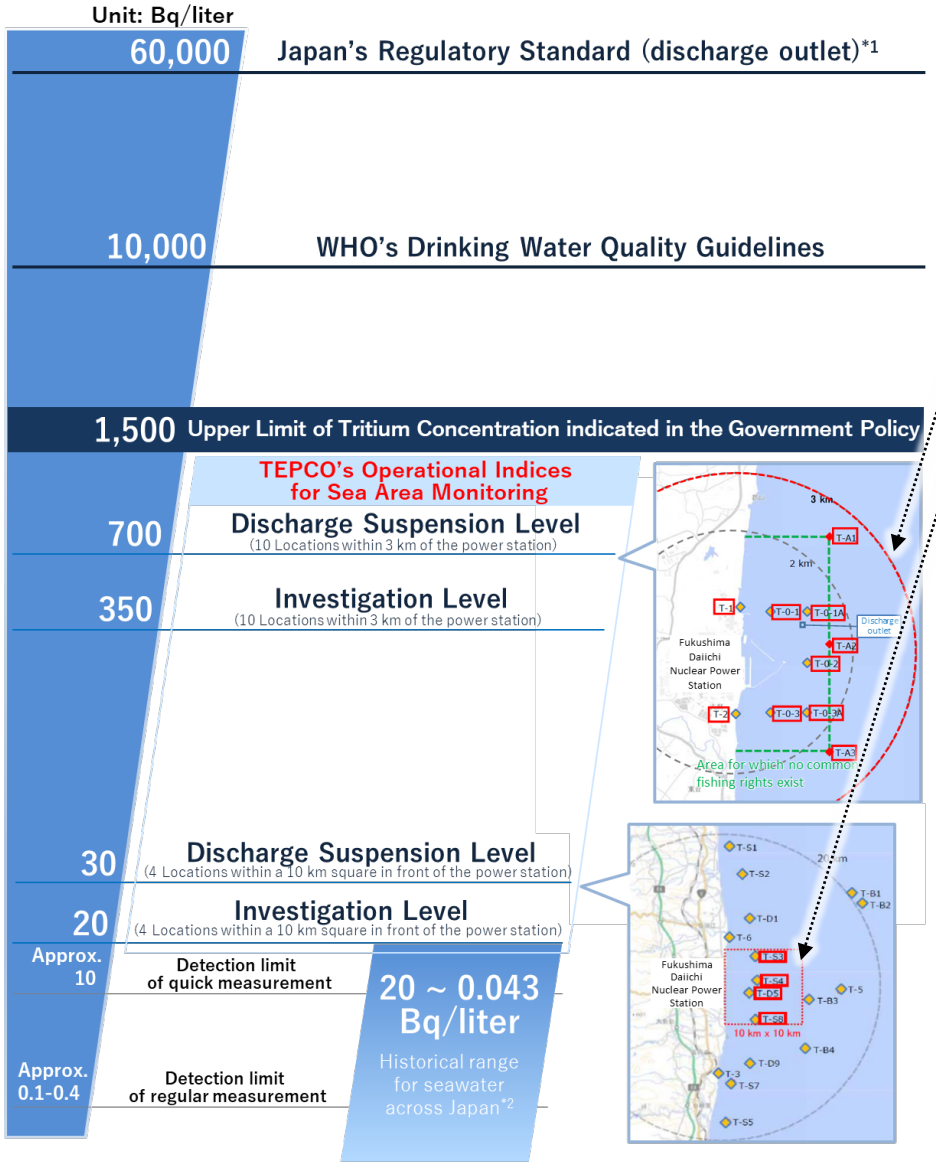
(Unit: Bq/liter)

	Sampling location*3	Frequency	May 2025
			19
In the vicinity of the discharge outlet	T-1	Twice a week*1	—
	T-2	Twice a week*1	—
	T-0-1	Once a day*2	<6.3
	T-0-1A	Once a day*2	<6.3
	T-0-2	Once a day*2	<6.3
	T-0-3A	Twice a week*1	—
	T-0-3	Twice a week*1	—
	T-A1	Twice a week*1	—
	T-A2	Once a day*2	<7.7
	T-A3	Twice a week*1	—
Outside the vicinity of the discharge outlet	T-D5	Once a week	<7.7
	T-S3	Once a month	—
	T-S4	Once a month	—
	T-S8	Once a month	—

※: A “less than” symbol (<) indicates that the analysis result was less than the detection limit ☐ indicates that the detected value

*1: Conduct twice a week during the discharge period and for once a week following the completion of discharge. Conduct once a week outside the discharge period, excluding one week following the completion of discharge
*2: Conduct once a week during the discharge period and once a week following the completion of discharge. Conduct once a month outside the discharge period, excluding one week following the completion of discharge
*3: For sampling locations, refer to “[Reference] Measurement monitoring plan”

[Reference] Comparison of tritium concentration in seawater



*1: This standard has been stipulated based on the calculation that if a person were to drink approximately 2L of the water coming out of the discharge outlet of a nuclear facility every day for one year, his/her exposure would be 1mSv.
*2: Source: Environmental Radioactivity and Radiation in Japan (Period: April 2019 to March 2022)

- We have set a discharge suspension level and an investigation level as TEPCO's operational indices.

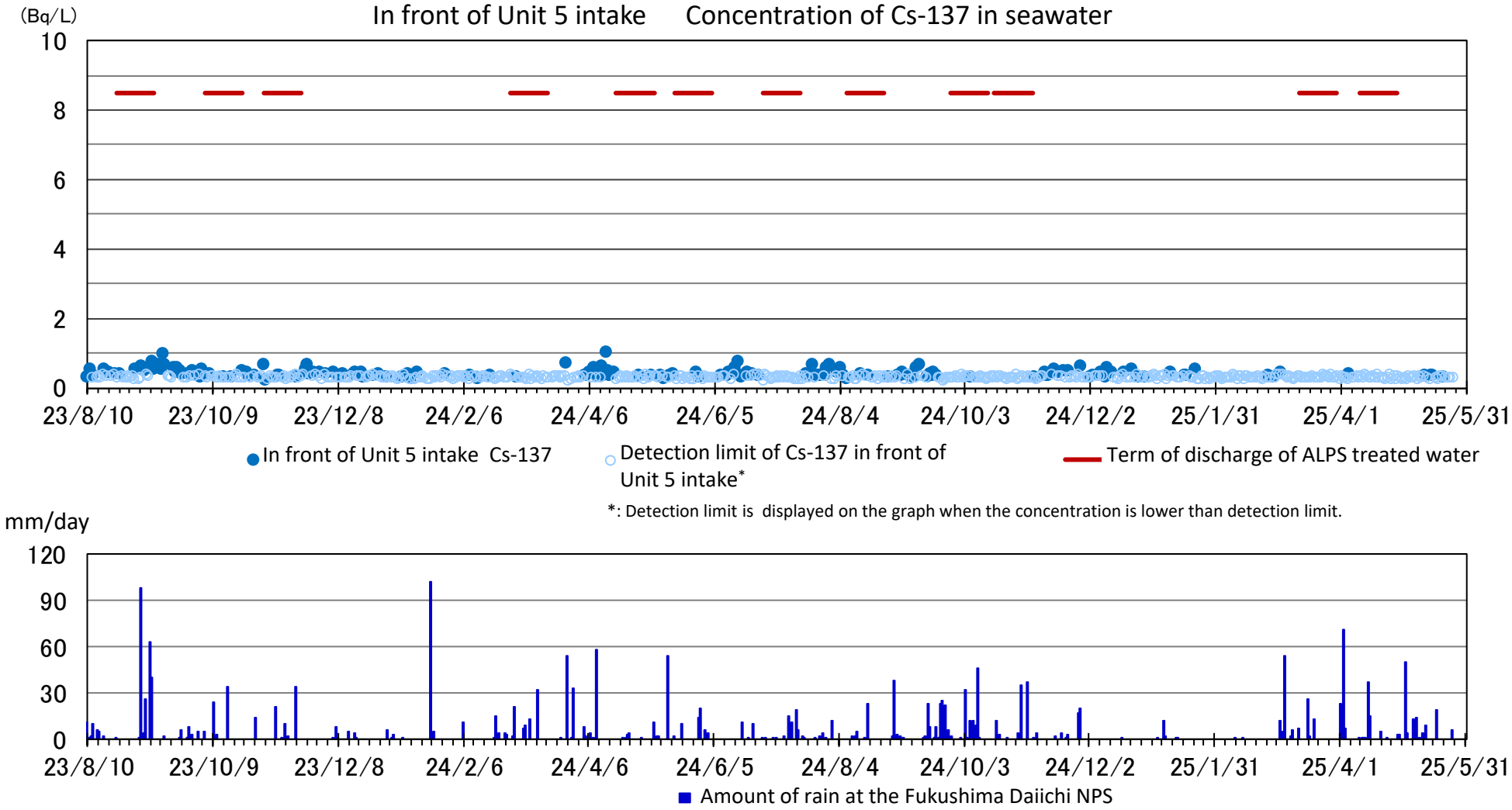
	Discharge suspension level	Investigation level
Within 3km of the power station	700 Bq/L	350 Bq/L
Within a 10km square in front of the power station	30 Bq/L	20 Bq/L

If the discharge suspension level is exceeded, the sea discharge will be immediately suspended.
If the investigation level is exceeded, facilities/operation status will be inspected and the frequency of monitoring will be increased as necessary.

- Even if the tritium concentration exceeds indices (Discharge suspension level and Investigation level), the levels are well below the Japan's regulatory standard of 60,000 Bq/L and the WHO's drinking water quality guidelines of 10,000 Bq/L, and we assess that the surrounding sea areas are still safe.
- It is expected that the concentration of tritium in seawater will be affected depending on the concentration of tritium in the treated water to be released in the future, and higher values than before will be detected. Even in such cases, it is evaluated that the concentration will remain below the investigation level and other indices.

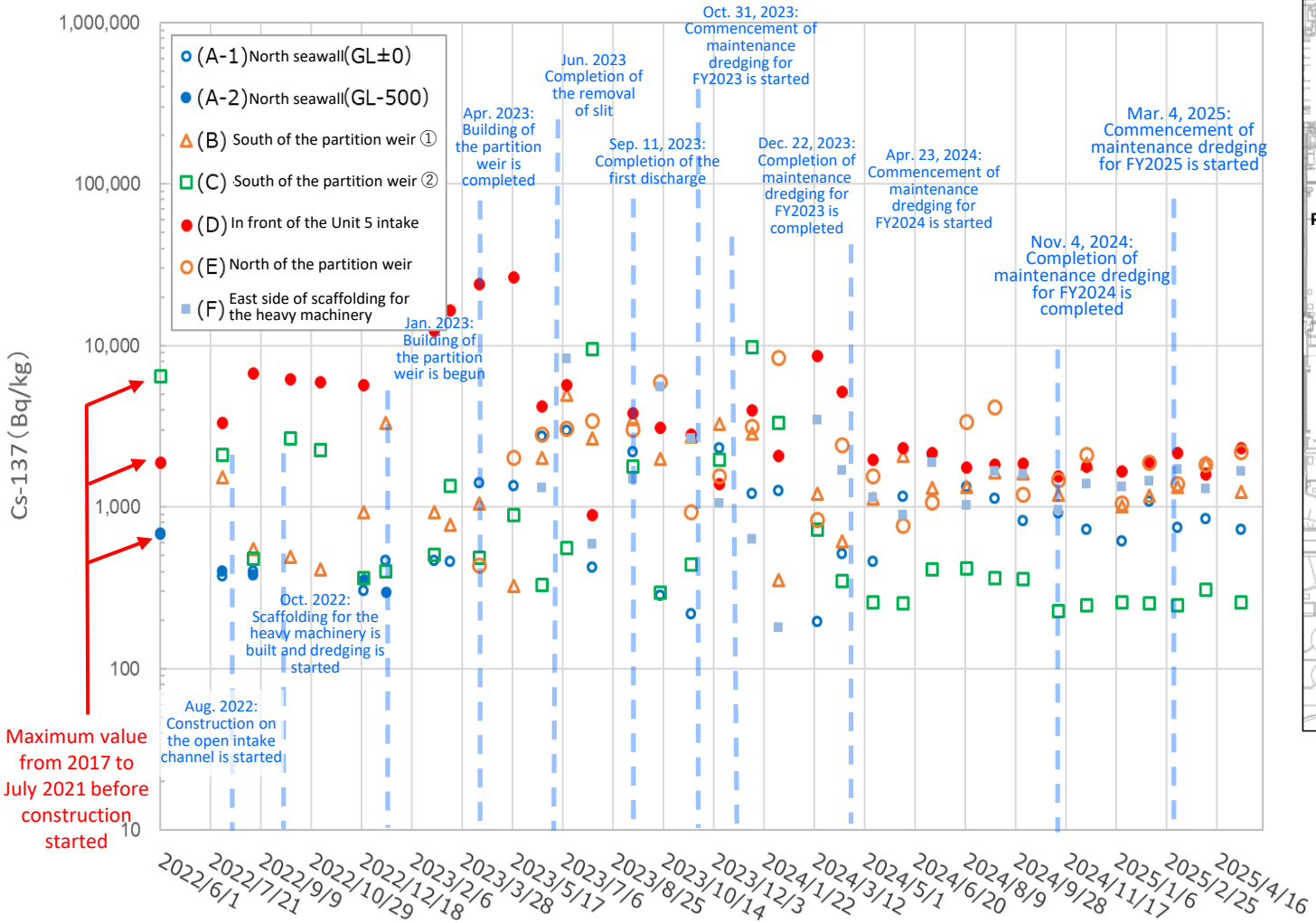
2-6. Unit 5 intake channel monitoring

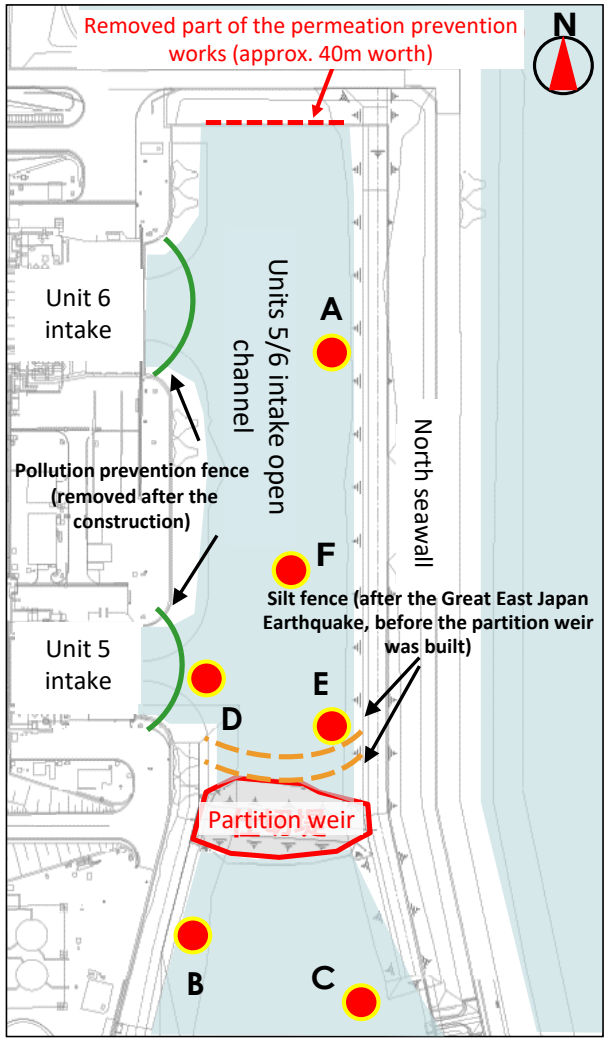
- Sea water monitoring results at near the intake for seawater to be used for dilution during the discharge of ALPS treated water have confirmed that values are similar to those outside of the term of the discharge.



3-5. Monitoring results for seabed soil inside the Unit 5/6 intake open channel (1)

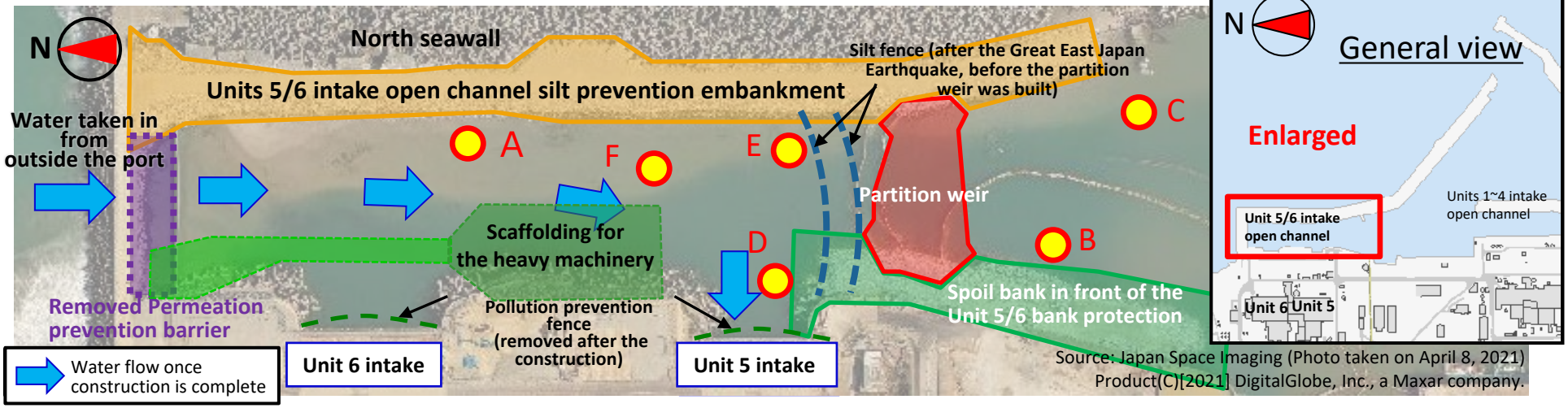
- Monitoring results for seabed soil in front of Unit 5 intake did not show significant fluctuations from the beginning of construction at the intake open channel until December 2022. While they showed higher readings after January 2023, we have confirmed that these readings decreased after the completion of silt removal.
- We will continue to monitor the seabed soil.





3-5. Monitoring results for seabed soil inside the Unit 5/6 intake open channel (2)

- The following shows monitoring results for seabed soil inside the unit 5/6 intake open channel from August 2022 to May 2025.



Source: Japan Space Imaging (Photo taken on April 8, 2021)
Product(C)[2021] DigitalGlobe, Inc., a Maxar company.

Sampling points		Before construction 2017 to July 2021	FY2022 Aug. ~ Mar.	2023 Apr. ~ Dec.	2024 Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	2025 Jan.	Feb.	Mar.	Apr.	May
A-1 North side of the Unit 5/6 open channel (North side of the silt fence (GL±0m))	Cs-134	4.4~52.3	31.5~39.8	32.0~69.5	44.5	51.1	34.6	34.4	34.8	53.6	51.4	40.4	59.0	64.5	38.1	57.6	37.4	45.4	38.7	45.0	51.3
	Cs-137	163.6~678.6	303.2~468.1	216.7~2975.0	1,210.0	1,270.0	195.2	510.4	461.7	1,169.0	2,107.0	1,337.0	1,135.0	826.2	922.9	725.1	615.9	1,079.0	741.1	850.5	727.6
A-2 North side of the Unit 5/6 open channel (North side of the silt fence (GL-0.5m))	Cs-134	14.4~58.5	32.5~38.3	-	※Only sampled from the surface (GL±0m) since sand was removed during dredging																
	Cs-137	310.0~689.8	299.1~404.0	-																	
B South side of the partition weir (① (South side of the silt fence))	Cs-134	723.0	34.5~65.6	48.8~97.1	75.2	38.2	52.8	35.1	50.6	48.1	39.7	58.2	55.7	64.5	42.5	57.6	39.4	38.9	48.3	55.0	35.7
	Cs-137	6,475.0	412.8~3,331.0	323.8~4943.0	2,868.0	353.9	1,205.0	613.8	1,125.0	2,086.0	1,308.0	1,342.0	1,638.0	1,622.0	1,190.0	1,863.0	1,006.0	1,185.0	1,340.0	1,889.0	1,251.0
C South side of the partition weir (② (South side of the silt fence))	Cs-134	183.0	30.9~68.7	37.1~234.8	153.3	115.8	42.4	26.5	36.9	39.2	29.5	41.4	38.1	48.6	31.0	29.8	33.8	28.9	39.2	36.7	33.7
	Cs-137	1,893.0	360.8~2,671.0	295.9~9519.0	9,737.0	3,345.0	723.9	348.9	257.0	253.0	409.7	419.6	361.7	356.2	227.4	246.4	258.6	252.8	245.6	306.9	257.5
D Unit 5 intake	Cs-134	-	101.6~3,546.0	50.2~690.7	61.8	50.3	177.8	114.8	79.6	50.3	40.3	64.9	69.3	83.5	52.0	50.7	35.9	35.9	39.7	44.4	47.1
	Cs-137	-	3,301.0~144,000.0	951.7~26400.0	3,981.0	2,069.0	8,661.0	5,140.0	1,970.0	2,305.0	2,166.0	1,763.0	1,834.0	1,866.0	1,563.0	1,773.0	1,656.0	1,898.0	2,175.0	1,587.0	2,306.0
E North side of the partition weir	Cs-134	-		35.6~147.0	64.4	161.2	46.4	40.4	38.3	37.0	41.6	55.0	50.1	55.7	33.1	42.7	38.4	59.7	30.0	44.4	47.4
	Cs-137	-		437.1~5795.0	3,145.0	8,371.0	829.4	2,427.0	1,551.0	764.6	1,066.0	3,371.0	4,154.0	1,191.0	1,460.0	2,118.0	1,060.0	1,878.0	1,388.0	1,834.0	2,202.0
F East side of scaffolding for the heavy machinery	Cs-134	-		40.2~166.1	58.6	31.3	55.3	37.8	87.1	34.1	40.7	49.1	74.8	58.6	48.2	63.2	40.0	42.8	42.2	50.0	56.4
	Cs-137	-		592.4~8303.0	630.9	178.7	3,446.0	1,694.0	1,148.0	891.0	1,884.0	1,020.0	1,654.0	1,606.0	955.9	1,392.0	1,332.0	1,447.0	1,710.0	1,295.0	1,664.0

※Unit: Bq/liter, Figures in gray were below the detection limit

[Reference] Total radioactivity of nuclides to be measured and assessed (30 nuclides)

TEPCO

- The following chart shows the total radioactivity (Bq) for nuclides to be measured and assessed (30 nuclides) during the discharge of Management number: 25-1-12. (Calculated from analysis values※1 (Bq/liter) and discharge volume (7,853m³) for each nuclide)

  ※1: It was confirmed that the sum of the ratios of legally required concentrations of the nuclides targeted for measurement/assessment is 0.083 and less than 1.

- The total radioactivity from nuclides for which analysis values were below detection limit (ND) have not been included.

Nuclide	Analysis value [Bq/liter]	Total radioactivity [Bq]	Nuclide	Analysis value [Bq/liter]	Total radioactivity [Bq]	Nuclide	Analysis value [Bq/liter]	Total radioactivity [Bq]
C-14	1.2E+01	9.4E+07	Cd-113m	<8.8E-02	–	Eu-155	<1.7E-01	–
Mn-54	<2.3E-02	–	Sb-125	1.0E-01	7.9E+05	U-234※3	<2.9E-02	–
Fe-55	<1.8E+01	–	Te-125m※2	3.8E-02	3.0E+05	U-238※3	<2.9E-02	–
Co-60	2.3E-01	1.8E+06	I-129	1.0E-01	7.9E+05	Np-237※3	<2.9E-02	–
Ni-63	<9.3E+00	–	Cs-134	<3.0E-02	–	Pu-238※3	<2.9E-02	–
Se-79	<9.9E-01	–	Cs-137	4.0E-01	3.1E+06	Pu-239※3	<2.9E-02	–
Sr-90	7.1E-01	5.6E+06	Ce-144	<3.1E-01	–	Pu-240※3	<2.9E-02	–
Y-90※2	7.1E-01	5.6E+06	Pm-147※2	<3.0E-01	–	Pu-241※2	<7.9E-01	–
Tc-99	1.9E-01	1.5E+06	Sm-151※2	<1.2E-02	–	Am-241※3	<2.9E-02	–
Ru-106	<2.1E-01	–	Eu-154	<6.8E-02	–	Cm-244※3	<2.9E-02	–

※2 Analysis values were assessed with radioactive equilibrium

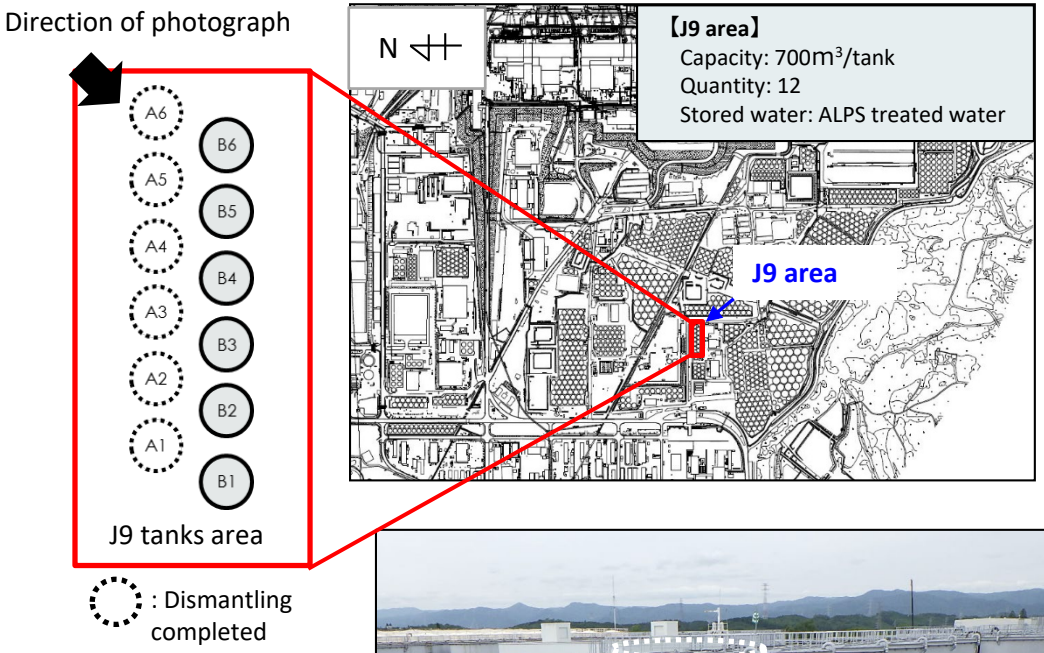
※3 Gross Alpha measurements

Report contents

* 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, “25-1-12” indicates that the data is for the first discharge of 2025, which is the twelfth discharge to date.

4. Status of dismantling of the J9 area tanks

- On February 13, 2025 the J9 area tanks were taken out of service and dismantling began on February 14, 2025.
- Dismantling of the sixth tank was completed on May 14, 2025. Preparatory work is currently underway for the dismantling of the seventh tank.



＜Tank Dismantling Results＞

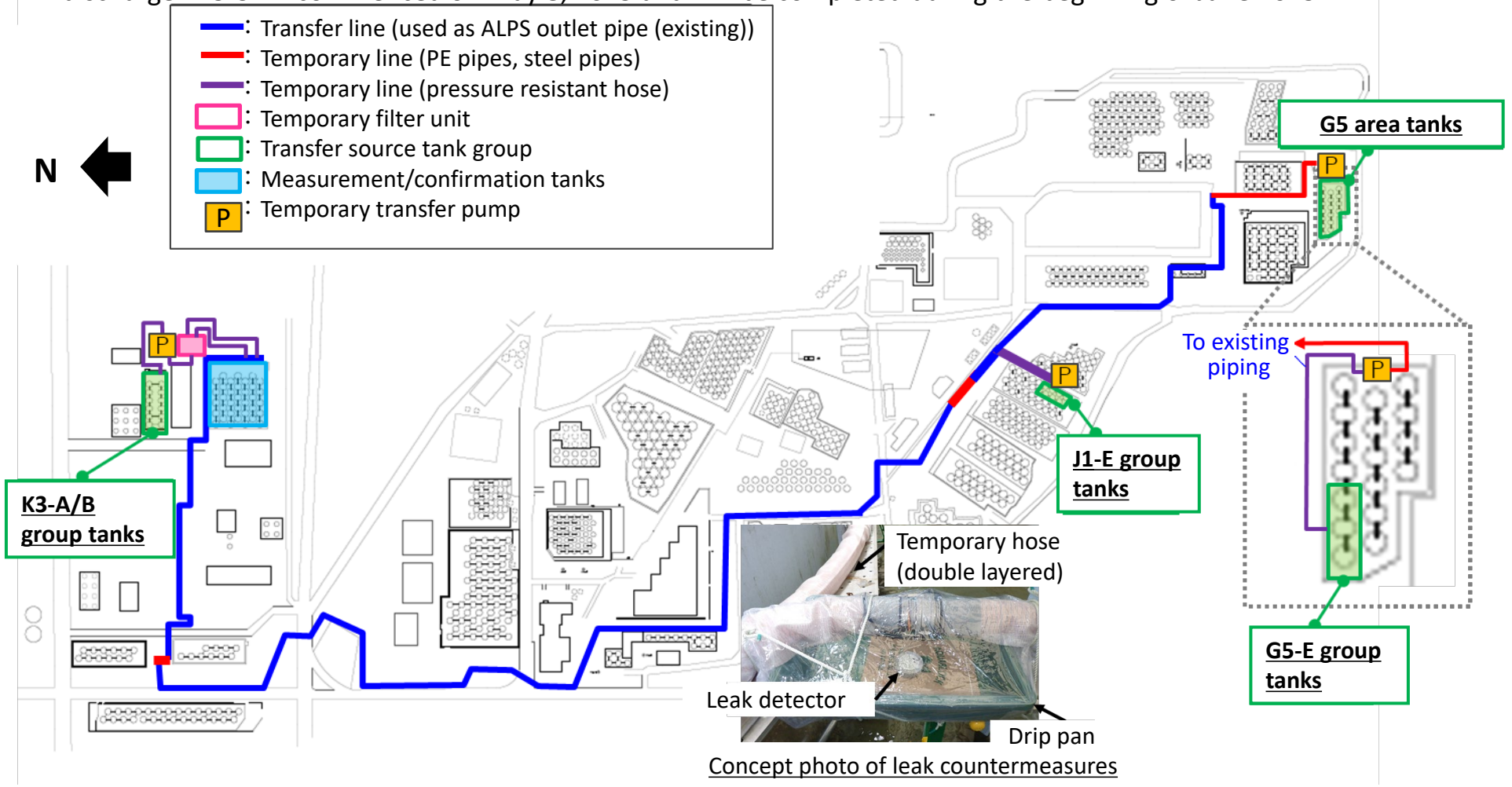
Tank number	Dismantling completed date
A6	Mar 4, 2025
A5	Mar 14, 2025
A4	Mar 31, 2025
A3	Apr 10, 2025
A2	Apr 21, 2025
A1	May 14, 2025

Report contents

* 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, “25-1-12” indicates that the data is for the first discharge of 2025, which is the twelfth discharge to date.

5. Transfer of ALPS treated water in preparation for the future discharges

- Transfer of ALPS treated water from K3 area Group A/B and J1 area Group E to measurement/confirmation facility tank group C in preparation for the discharge of Management number: 25-2-13 has conducted (April 3 to April 25, 2025). Circulation/agitation of the tanks commenced on May 9, 2025 and samples were taken on May 16, 2025. Samples are currently being analyzed.
- Transfer of the water in Group E-J1 and Group E-G5 to measurement/confirmation facility Group A in preparation for discharge #25-3-14 commenced on May 8, 2025 and will be completed during the beginning of June 2025.

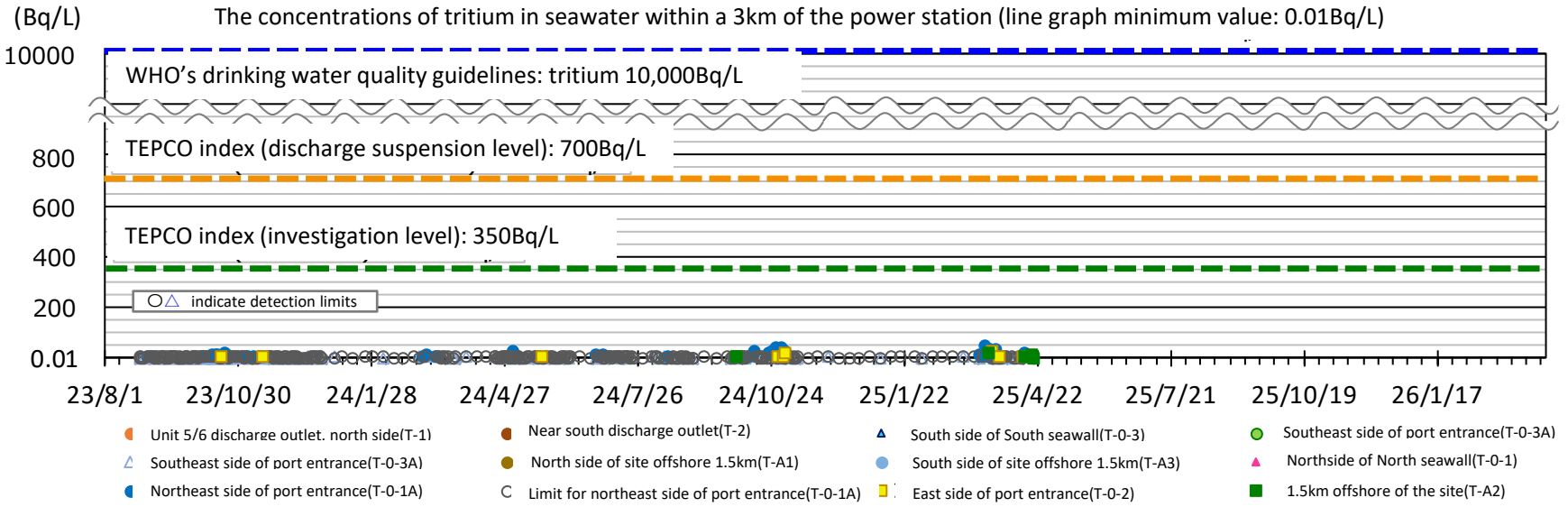


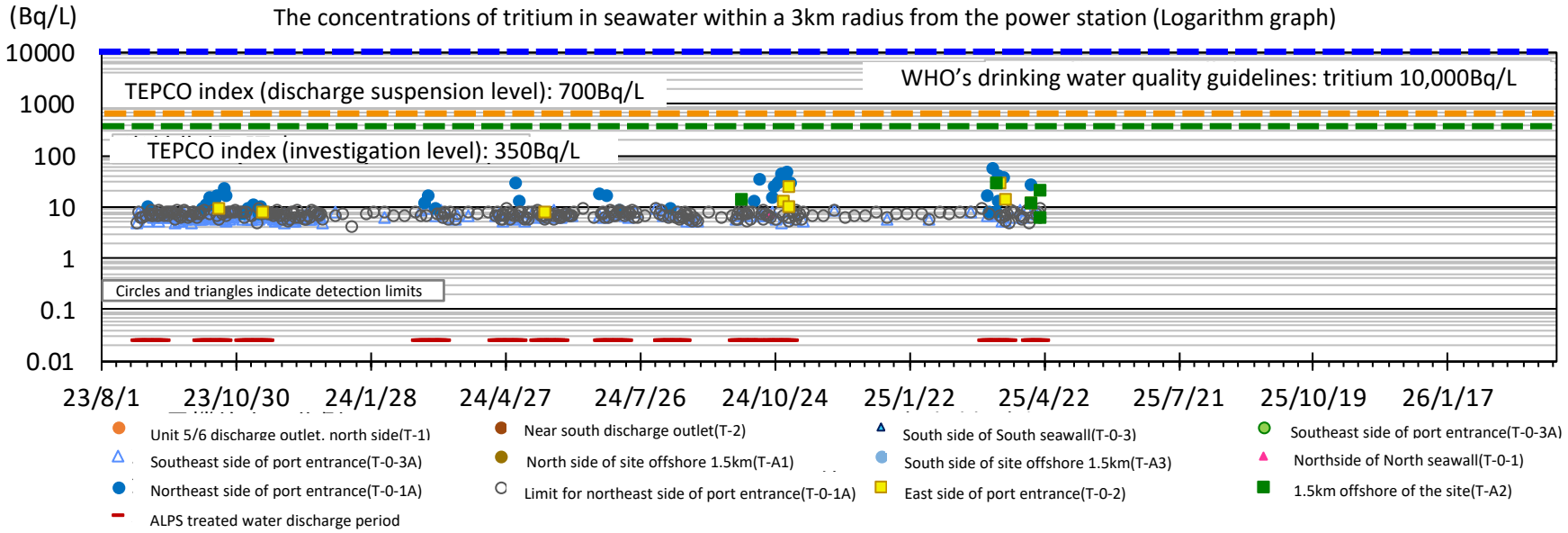
Report contents

* 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, “25-1-12” indicates that the data is for the first discharge of 2025, which is the twelfth discharge to date.

[Reference] Sea area monitoring results (1/2)　quick monitoring

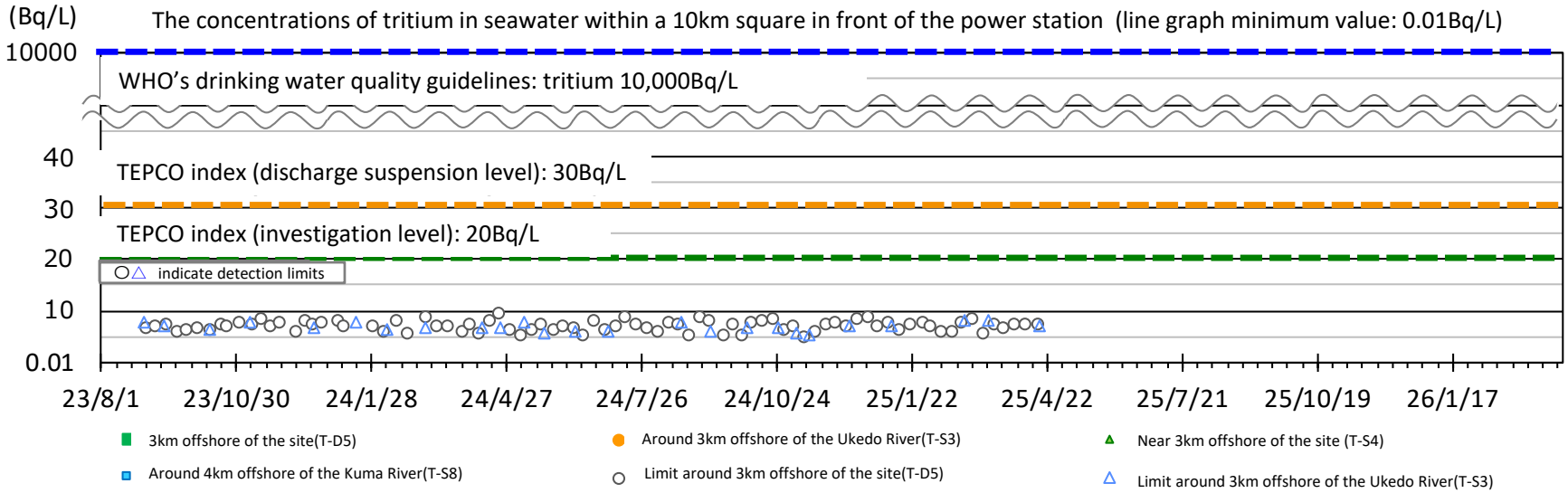
within 3km of the power station

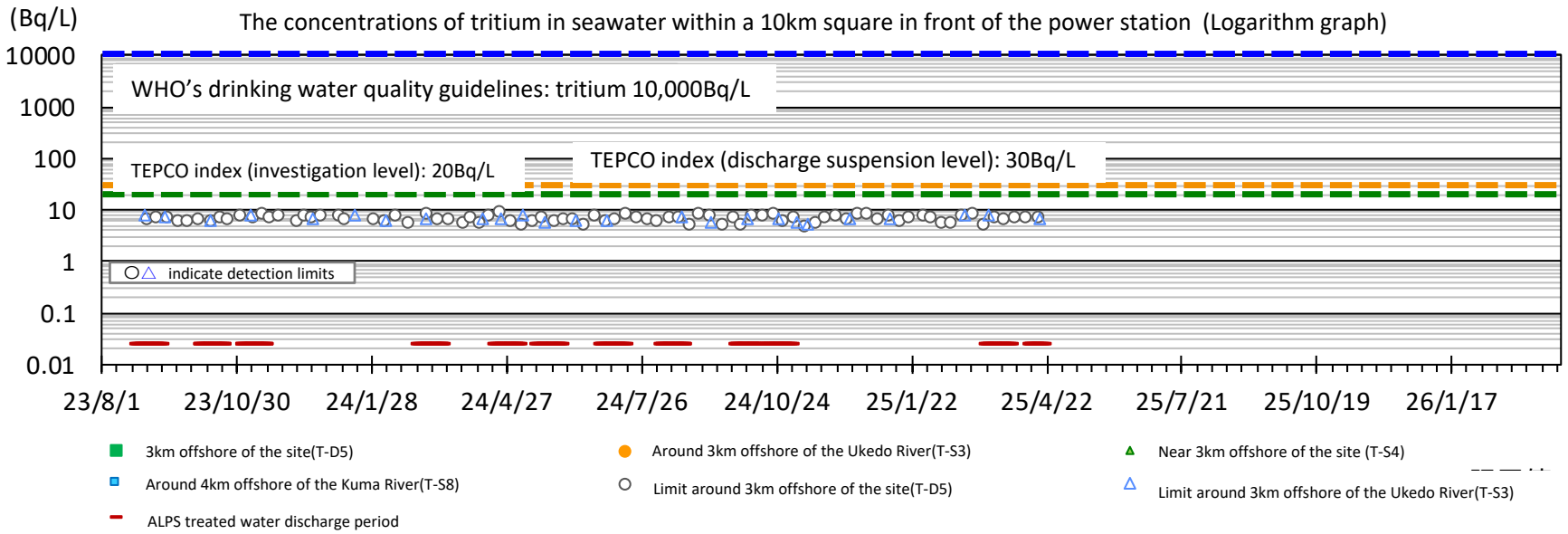




[Reference] Sea area monitoring results (2/2)　quick monitoring

within a 10km square in front of the power station





[Reference] Sea area monitoring plan

for obtaining quick measurements of the concentration of tritium in seawater

○ We have engaged in monitoring to obtain quick measurements of the concentration of tritium in seawater with targeting the upper detection limit for 10Bq/liter, and index to determine discharge suspension (the discharge suspension level) was set.

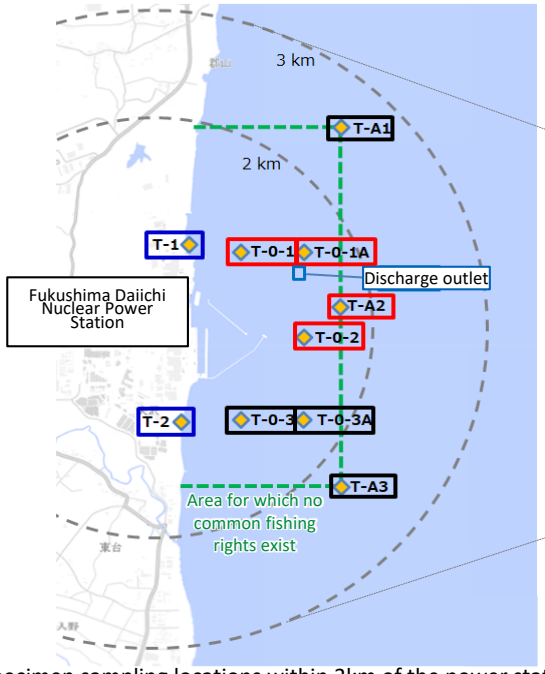


Figure 1: Specimen sampling locations within 3km of the power station (near the discharge outlet)

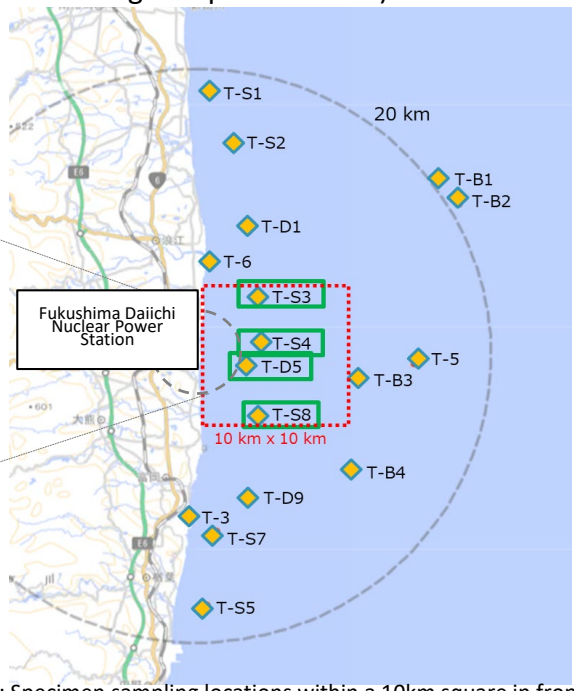


Figure 2: Specimen sampling locations within a 10km square in front of the power station

: Monitoring points used to obtain quick results (10 locations)

Index (Discharge suspension level) 700Bq/L

Index (investigation level) 350Bq/L

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

Index (Discharge suspension level) 30Bq/L

Index (investigation level) 20Bq/L

	【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)