ALPS Treated Water Discharge Status Update

May 28, 2026

TEPCO

Tokyo Electric Power Company Holdings, Inc.

Report contents

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[Reference] Sea area monitoring history after the commencement of discharge

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1. Annual ALPS treated water discharge volume for FY2025

- The annual tritium discharge from the FY2025 ALPS treated water discharge (seven discharges in total) was **approximately 16 T Bq, confirming it remained below 22 T Bq discharge standard.**
- The following chart shows the total radioactivity (Bq) for nuclides to be measured and assessed (29 nuclides). The detected radionuclides are totaled for each measurement/confirmation tank. It was also confirmed that the sum of the ratios of regulatory concentrations of the nuclides targeted for measurement/assessment is less than 1 for each discharge.

Nuclide	Analysis value [Bq/liter]	Nuclide	Analysis value [Bq/liter]	Nuclide	Analysis value [Bq/liter]
C-14	1.7E+09	Cd-113m	－※1	Eu-155	－※1
Mn-54	－※1	Sb-125	9.4E+06	U-234	－※1
Fe-55	－※1	Te-125m	3.5E+06	U-238	－※1
Co-60	1.9E+07	I-129	2.4E+07	Np-237	－※1
Ni-63	－※1	Cs-134	－※1	Pu-238	－※1
Se-79	－※1	Cs-137	1.3E+07	Pu-239	－※1
Sr-90	6.2E+07	Ce-144※3	－※1	Pu-240	－※1
Y-90	6.2E+07	Pm-147	－※1	Pu-241	－※1
Tc-99	3.7E+07※2	Sm-151	－※1	Am-241	－※1
Ru-106	－※1	Eu-154	－※1	Cm-244	－※1

※1 The total radioactivity (Bq) from nuclides for which analysis values were below detection limit (ND) have not been converted.

※2 Converted only for three discharges in FY2025 with detectable analytical results (out of seven total).

※3 Excluded from the list of measured and assessed radionuclides starting from the third discharge in FY2025.

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2-1. FY2025 Facility inspections overview

- The inspections of measurement/confirmation tank group C has been completed, and all inspections planned for FY2025 have been finished. No abnormalities affecting the equipment performance were identified.
- Based on the inspection results, we will continue to consider measures to maintain facilities functionality, taking into account long-term operation through the completion of the discharge.

Facility	Primary inspection details	Inspection status
Measurement/ confirmation facilities	**Measurement/confirmation tank group C: Full internal inspections**	**Completed (no abnormalities (reported on the following pages))**
	Circulation pumps: Disassembly inspection	Completed (no abnormalities (reported on November 27, 2025))
	Agitators: Insulation resistance measurements	Completed (no abnormalities (reported on February 26, 2026))
	Miscellaneous: Strainer cleaning, etc.	Completed (no abnormalities (reported on February 26, 2026))
Transfer facilities	**ALPS treated water transfer pumps: Lubrication oil for bearings replacement**	Completed (no abnormalities (reported on February 26, 2026))
	Emergency isolation valve-1: Disassembly inspection	Completed (no abnormalities (reported on February 26, 2026))
	Emergency isolation valve-2: External inspection	Completed (no abnormalities (reported on February 26, 2026))
	Miscellaneous: Strainer cleaning, etc.	Completed (no abnormalities (reported on February 26, 2026))
Dilution facilities	**Seawater transfer pump system A: Disassembly inspection**	Completed (no abnormalities (reported on December 25, 2025))
	Seawater transfer pump system B: Gland packing replacement	Completed (no abnormalities (reported on February 26, 2026))
	Seawater transfer pump system C: Gland packing replacement	Completed (no abnormalities (reported on February 26, 2026))
	Sea water transfer pipes/seawater pipe header: Internal inspection	Completed (no abnormalities (reported on January 29, 2026))
	Discharge vertical shaft (upper-stream storage): Internal inspection	Completed (no abnormalities (reported on February 26, 2026))
Discharge facilities	**Discharge vertical shaft (down-stream storage), discharge tunnel: Internal inspection**	Completed (no abnormalities (reported on February 26, 2026))
Seawater intake facilities	**Partitioning weirs: External inspection**	Completed (no abnormalities (reported on January 29, 2026))
	Intake channel system A: Cleaning, Internal inspection, repair	Completed (no abnormalities (reported on February 26, 2026))

2-2. Measurement/confirmation tank group C inspection result details

- On April 28, 2026, we completed an inspection of the internal surfaces of measurement/confirmation tank group C during which we confirmed that there were no abnormalities.
- An ultrasonic thickness gauge was used to measure the thickness of the tank walls from the inside and we confirmed that the walls are of the required thickness.

※ Thickness measurements: Minimum thickness: **14.36 mm** (Required thickness: 10.2mm)

＜ Prior to reapplying sealant ＞

The overall brown color is from water stains, etc.

＜ After reapplying sealant ＞

Conditions inside measurement/confirmation tank group C (C7 tank)

2-3. FY2026 Facility inspections overview

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- The inspections listed below will be implemented in FY2026 as well.

Facility	Primary inspection details	Scheduled inspection period
Measurement/ confirmation facilities	**Measurement/confirmation tank group A: Full internal inspections**	October 2026 to around May 2027
	Circulation pumps: Lubrication oil for bearings replacement	September 2026 to around November 2026
	Agitators: Insulation resistance measurements	October 2026※1 to around May 2027
	Miscellaneous: Strainer cleaning, etc.	August 2026※1 to around May 2027
Transfer facilities	**ALPS treated water transfer pumps: Disassembly inspection**	November 2026 to around February 2027
	Emergency isolation valve-1: Disassembly inspection	November 2026 to around February 2027
	Emergency isolation valve-2: External inspection	January 2027 to around February 2027
	Miscellaneous: Strainer cleaning, etc.	August 2026※1 to around May 2027
Dilution facilities	**Seawater transfer pump system A: Gland packing replacement**	November 2026 to around February 2027
	Seawater transfer pump system B: Disassembly inspection	November 2026 to around February 2027
	Seawater transfer pump system C: Gland packing replacement	November 2026 to around February 2027
	Sea water transfer pipes/seawater pipe header: Internal inspection	November 2026 to around February 2027
	Discharge vertical shaft (upper-stream storage): Internal inspection	November 2026 to around February 2027
Discharge facilities	**Discharge vertical shaft (down-stream storage), discharge tunnel: Internal inspection**	December 2026 to around February 2027
Seawater intake facilities	**Partitioning weirs: External inspection**	December 2026 to around February 2027
	Intake channel system B: Cleaning, Internal inspection, repair	November 2026 to around February 2027

※ Conducted during the shutdown periods of each system.

Report contents

3-1. Overview

- Prior to the discharge of ALPS treated water into the sea, we confirm that discharge standards have been met (sum of the ratios of the regulatory concentrations limits of radioactive nuclides, with the exception of tritium, is less than 1). The 29 nuclides have been analyzed for measurement/assessment.
- The nuclides targeted for measurement/assessment have been selected based on the flow stipulated in the implementation plan and conservative assessments indicating that they exist in significant concentrations in contaminated water prior to ALPS treatment (concentrations that exceed 1/100 of the regulatory concentration limit). And, nuclides that theoretically may be present in contaminated water but have not been detected in significant concentrations during past analysis of contaminated water/treated water are exempt from measurement/assessment during the final stage of the flow.
- However, it is possible that the concentration of radioactive substances in contaminated water may fluctuate in conjunction with future decommissioning progress. Therefore, the nuclides (five nuclides) that are exempt from measurement/assessment during the final stage of the flow have been targeted for monitoring and are continually checked once a year to confirm that they do not exist in significant concentrations in contaminated water prior to ALPS treatment.

* Nuclides targeted for monitoring (Five nuclides)

Cl-36 Chlorine	**Nb-93m** Niobium	**Nb-94** Niobium	**Mo-93** Molybdenum	**Ba-133** Barium

- Analysis results of these nuclides targeted for monitoring for FY2025 confirm that the concentrations of all five nuclides targeted for monitoring are less than 1/100 of the regulatory concentration limit (see the next page for detailed analysis results). In addition, based on the flow specified in the implementation plan, a re-evaluation of the nuclides subject to measurement/assessment was conducted for FY2026, confirming that there were no changes to the target nuclides.

3-2. Analysis results of the nuclides targeted for monitoring

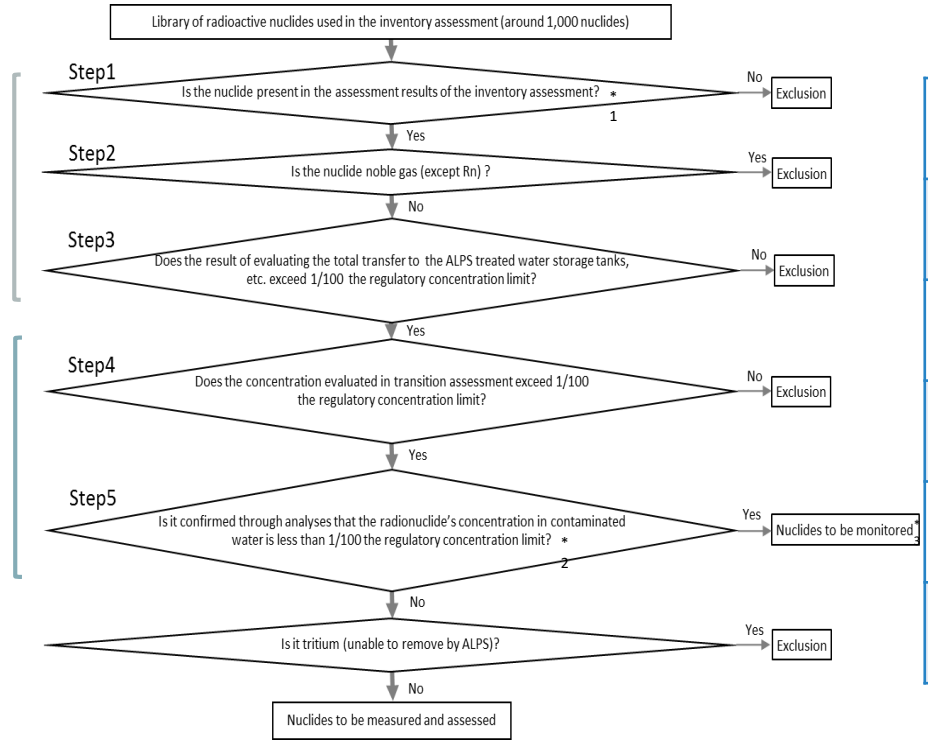
- Contaminated water prior to ALPS treatment was analyzed during FY2025 in order to confirm that the nuclides targeted for monitoring do not exist in contaminated water at significant concentrations. The results are shown in the chart below.
- The concentrations for all five nuclides targeted for monitoring (Cl-36, Nb-93m, Nb-94, Mo-93, Ba-133) were found to be less than 1/100 of the regulatory concentration limit.
- Additionally, Cd-113m selected as a nuclide for measurement/assessment from the fourth discharge in FY2024 after being detected at a significant concentration in FY2023 monitoring analyses, was also voluntarily measured to assess trends, and as in the previous year the concentration was found to be 5.1E+00Bq/L, which is approximately 13/100 that of the regulatory concentration limit (4.0E+01Bq/L).

＜Analysis results for nuclides targeted for monitoring＞

Analyzed nuclide	Sampling location	Sampling date	Analysis result (Bq/L)	0.01 of regulatory concentration limit (Bq/L)
Cl-36	ALPS inlet (Contaminated water prior to ALPS treatment)	February 6, 2026	ND (< 3.2E+00)	9.0E+00
Nb-93m			ND (< 1.3E+01)	7.0E+01
Nb-94			ND (< 7.3E-01)	5.0E+00
Mo-93			ND (< 1.6E+00)	3.0E+00
Ba-133			ND (< 3.3E+00)	5.0E+00

3-3. Nuclides targeted for measurement/assessment

- Prior to the discharge of ALPS treated water into the sea, we confirm that discharge standards have been met (sum of the ratios of the regulatory concentrations limits of radioactive nuclides, with the exception of tritium, is less than 1). The 29 nuclides have been analyzed for measurement/assessment.
- The nuclides targeted for measurement/assessment have been selected based on the flow stipulated in the implementation plan and conservative assessments indicating that they exist in significant concentrations in contaminated water prior to ALPS treatment.
- The nuclides currently targeted for measurement/assessment (29 nuclides) are as follows. The nuclides targeted for measurement/assessment have been the re-evaluated annually in accordance with the flow. As a result of the re-evaluation conducted in fiscal year 2026, it was confirmed that there were no changes to the target nuclides.



Nuclides targeted for measurement/assessment: 29 nuclides

C-14 Carbon	Sr-90 Strontium	Te-125m Tellurium	Eu-154 Europium	Pu-239 Plutonium
Mn-54 Manganese	Y-90 Yttrium	I-129 Iodine	Eu-155 Europium	Pu-240 Plutonium
Fe-55 Iron	Tc-99 Technetium	Cs-134 Cesium	U-234 Uranium	Pu-241 Plutonium
Co-60 Cobalt	Ru-106 Ruthenium	Cs-137 Cesium	U-238 Uranium	Am-241 Americium
Ni-63 Nickel	Cd-113m Cadmium	Pm-147 Promethium	Np-237 Neptunium	Cm-244 Curium
Se-79 Selenium	Sb-125 Antimony	Sm-151 Samarium	Pu-238 Plutonium	

*1：The inventory assessment decay period has been set properly in accordance with when the selection results are used (initially set to be 2023 (12 years after the accident))
*2：The maximum detection value is used for nuclides that have been detected in the past, and the minimum detection limit is used for nuclides that have never been detected
*3：Nuclides that are continually measured to confirm that there are no significant concentrations in contaminated water

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4-1. Sea area monitoring history (1/2)

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◯ 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/L)

	Sampling location*3	Frequency	April 2026								May 2026		
			21	22	23	24	25	26	27	28	4	5	11
In the vicinity of the discharge outlet	T-1	Twice a week*1	-	-	<5.9	-	-	-	<7.9	-	<8.1	-	-
	T-2	Twice a week*1	-	-	<5.9	-	-	-	<6.9	-	<8.1	-	-
	T-0-1	Once a day*2	-*4	-*4	<6.0	-*4	<7.7	<6.6	-*4	<7.5	<6.7	-	<7.1
	T-0-1A	Once a day*2	-*4	-*4	<7.7	-*4	<7.8	<6.6	-*4	<7.7	<8.2	-	<7.1
	T-0-2	Once a day*2	-*4	-*4	<7.7	-*4	<7.7	<6.7	-*4	<7.4	<6.7	-	<7.1
	T-0-3A	Twice a week*1	-	-	<6.1	-	-	-	-*4	-	<8.2	-	-
	T-0-3	Twice a week*1	-	-	<7.7	-	-	-	-*4	-	<8.2	-	-
	T-A1	Twice a week*1	-	-	<6.0	-	-	-	-*4	-	<6.3	-	-
	T-A2	Once a day*2	-*4	-*4	<6.0	-*4	<7.7	<6.6	-*4	<7.7	<6.3	-	<6.4
	T-A3	Twice a week*1	-	-	<6.0	-	-	-	-*4	-	<6.3	-	-
Outside the vicinity of the discharge outlet	T-D5	Once a week	-	-	-	-	-	-	-	<7.6	-	<8.7	<6.4
	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 : Term of discharge of ALPS treated water

*1: Conduct twice a week during the discharge period and for one week following the completion of discharge. Conduct once a month outside the discharge period, excluding the one week following the completion of discharge
*2: Conduct once a day during the discharge period and for one week following the completion of discharge. Conduct once a week outside the discharge period, excluding the 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

4-1. Sea area monitoring history (2/2)

(Unit: Bq/L)

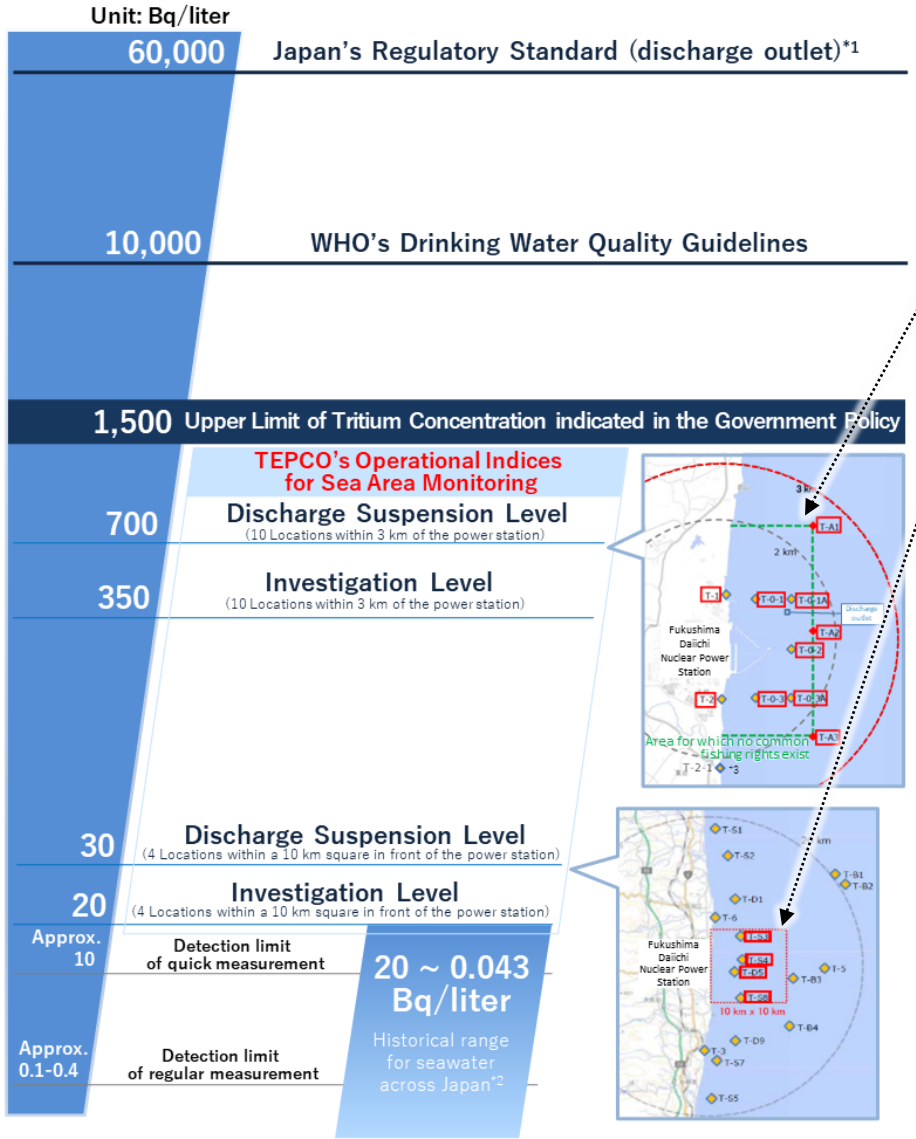
	Sampling location[*3]	Frequency	May 2026		
			18	19	25
In the vicinity of the discharge outlet	T-1	Twice a week[*1]	-	-	-
	T-2	Twice a week[*1]	-	-	-
	T-0-1	Once a day[*2]	<5.9	-	<7.1
	T-0-1A	Once a day[*2]	<5.9	-	<7.2
	T-0-2	Once a day[*2]	<5.9	-	<7.1
	T-0-3A	Twice a week[*1]	-	-	-
	T-0-3	Twice a week[*1]	-	-	-
	T-A1	Twice a week[*1]	-	-	-
	T-A2	Once a day[*2]	<8.7	-	<7.0
	T-A3	Twice a week[*1]	-	-	-
Outside the vicinity of the discharge outlet	T-D5	Once a week	<8.7	-	<7.0
	T-S3	Once a month	-	<7.6	-
	T-S4	Once a month	-	<7.5	-
	T-S8	Once a month	-	<7.5	-

※: 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

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

[Supplement] Comparison of tritium concentration in seawater

【Reference】 Comparison of concentration of tritium 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)
*3: Alternative location if safety cannot be ensured at T-2

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

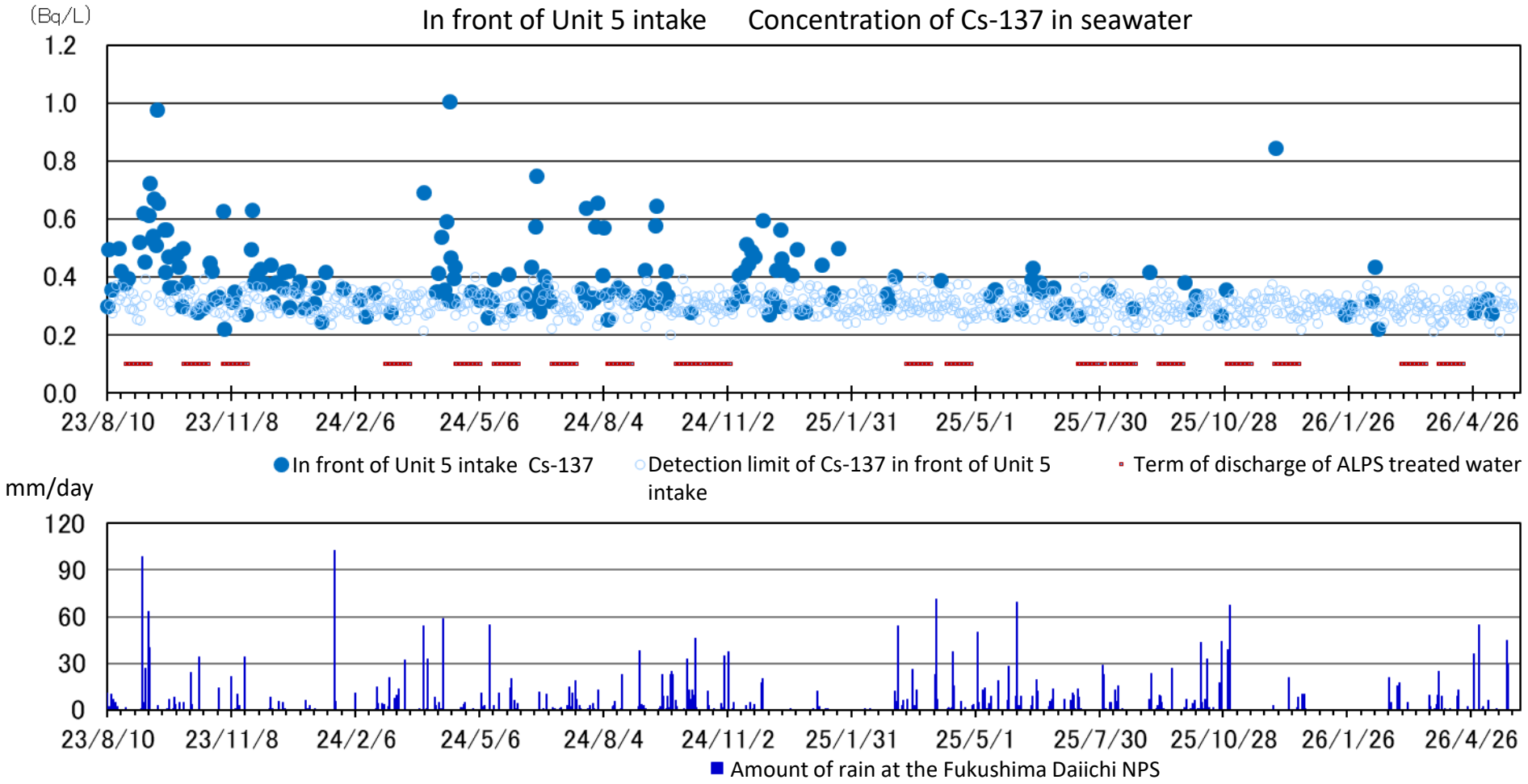
	Discharge suspension level	Investigation level
Within 3km of the power station	700 Bq/L	350 Bq/L
Within a 10km square in front of the power station	30 Bq/L	20 Bq/L

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.

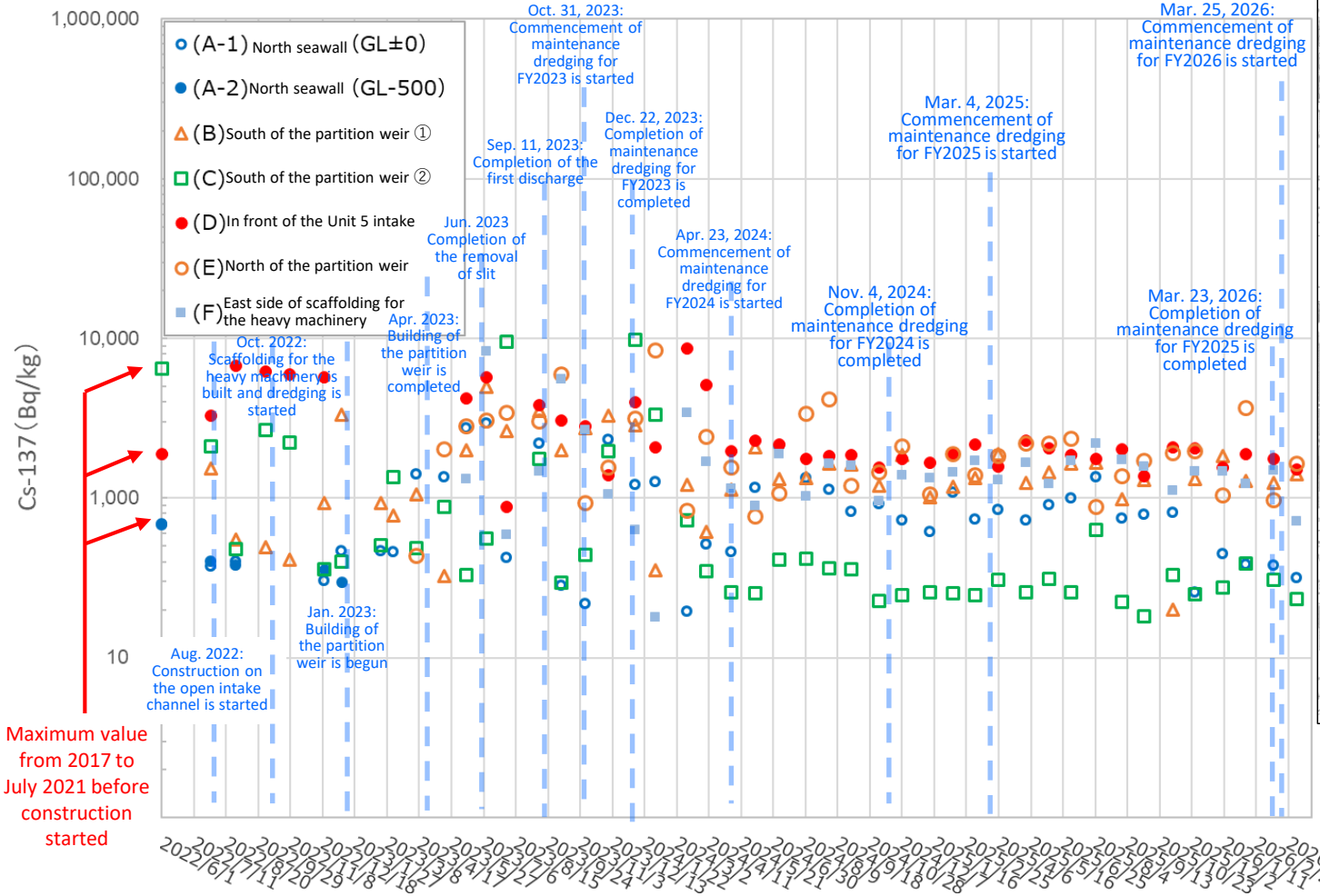
4-2. Unit 5 intake channel monitoring

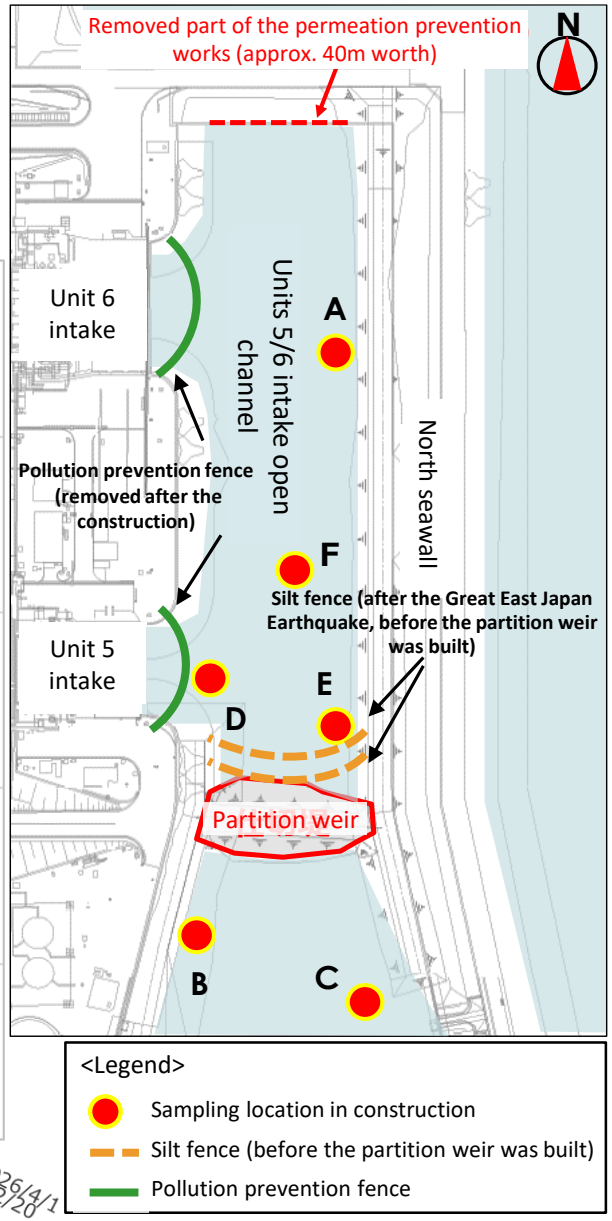
- Sea water monitoring results at near the intake for seawater to be used for dilution during the discharge of ALPS treated water have confirmed that values are similar to those outside of the term of the discharge.



4-3. 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.





4-3. Monitoring results for seabed soil inside the Unit 5/6 intake open channel (2)

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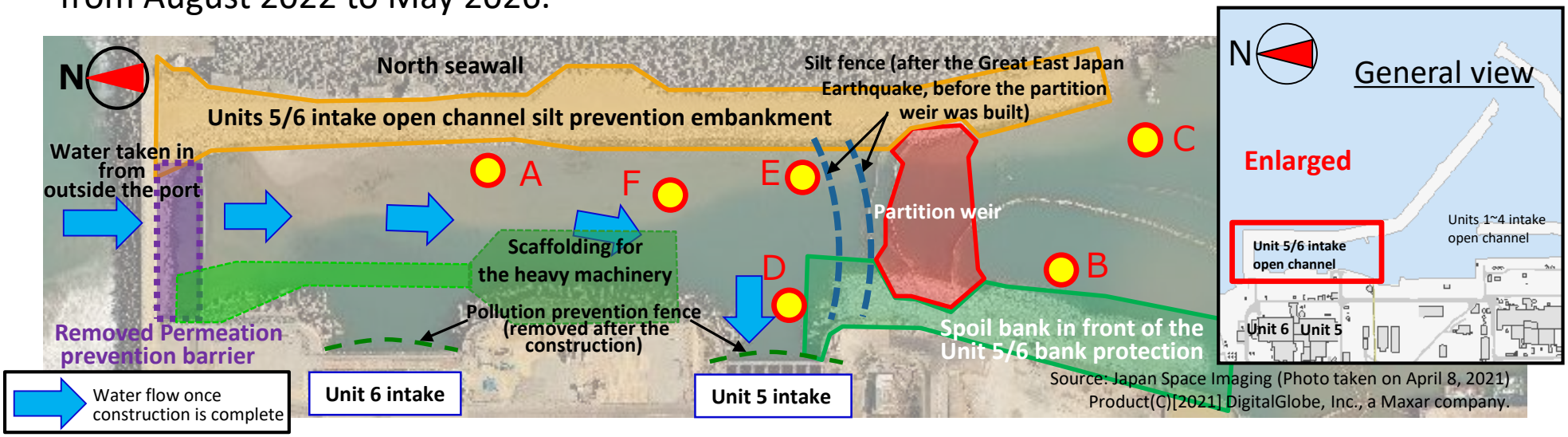
- The following shows monitoring results for seabed soil inside the unit 5/6 intake open channel from August 2022 to May 2026.



Sampling points		Before construction 2017 to July 2021	FY2022 Aug. ~ Mar.	FY2023 Apr. ~ Mar.	FY2024 Apr. ~ Mar.	FY2025 Apr. ~ Mar.	FY2026 Apr.	FY2026 May
A−1 North side of the Unit 5/6 open channel (North side of the silt fence (GL±0m))	Cs−134	ND～9.5 (4.4)	ND (31.5～39.8)	ND～65.5 (32.0)	ND (34.4～64.5)	ND (29.7～92.3)	ND (24.3)	ND (34.8)
	Cs−137	163.6～678.6	303.2～468.1	216.7～2975.0	461.7～2107.0	258.1～1352.0	316.9	204.3
A−2 North side of the Unit 5/6 open channel (North side of the silt fence (GL-0.5m))	Cs−134	ND～20.0 (25.6)	ND (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	ND～73.9 (42.1)	ND～97.1 (38.2)	ND (35.1～64.5)	ND (35.7～84.1)	ND (63.8)	ND (45.4)
	Cs−137	6,475.0	412.8～3,331.0	323.8～4943.0	613.8～1889.0	200.1～1889.0	1,408.0	2,040.0
C South side of the partition weir (② (South side of the silt fence))	Cs−134	183.0	ND～51.3 (30.9)	ND～234.8 (37.1)	ND (26.5～48.6)	ND (25.1～50.7)	ND (38.8)	ND (25.2)
	Cs−137	1,893.0	360.8～2,671.0	295.9～9519.0	227.4～419.6	182.1～633.3	233.6	304.0
D Unit 5 intake	Cs−134	—	101.6～3,546.0	ND～690.7 (50.3)	ND～114.8 (35.9)	ND (37.6～80.5)	ND (53.4)	ND (52.7)
	Cs−137	—	3,301.0～144,000.0	951.7～26400.0	1563.0～2306.0	1380.0～2306.0	1,509.0	1,026.0
E North side of the partition weir	Cs−134	—	—	ND～161.2 (35.6)	ND (30.0～59.7)	ND (36.0～82.8)	ND (40.5)	ND (53.5)
	Cs−137	—	—	437.1～5795.0	746.6～4154.0	882.6～3652.0	1,654.0	1,921.0
F East side of scaffolding for the heavy machinery	Cs−134	—	—	ND～166.1 (31.3)	ND (34.1～87.1)	ND (34.1～69.2)	ND (58.3)	ND (38.7)
	Cs−137	—	—	592.4～8303.0	891.0～1884.0	1122.0～2187.0	713.2	404.5

(Note) Unit: Bq/liter, Figures in gray indicate that all data during the relevant period were below the detection limit, the values shown in parentheses in the table above indicate the detection limits.

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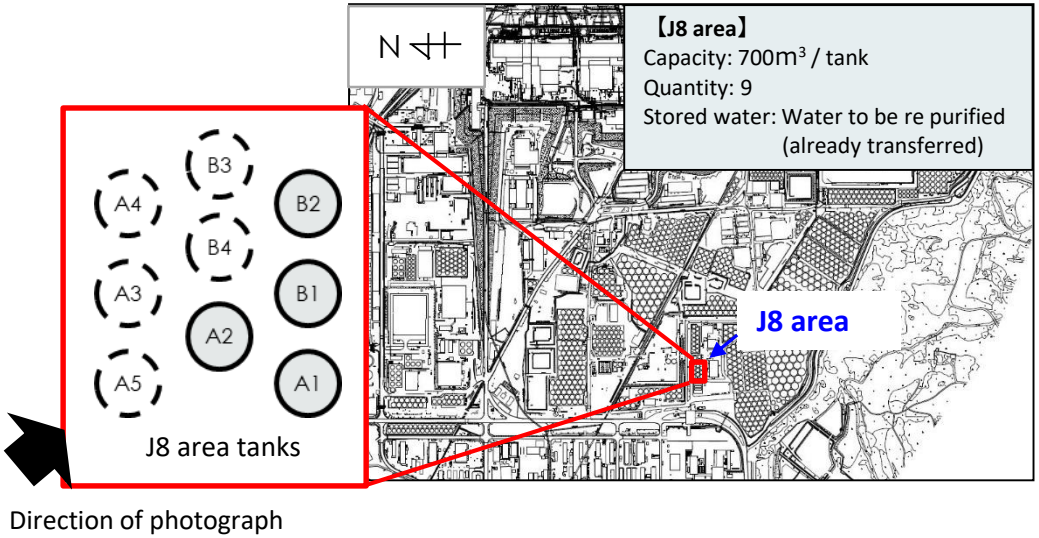
5. Dismantling of J8 area tanks

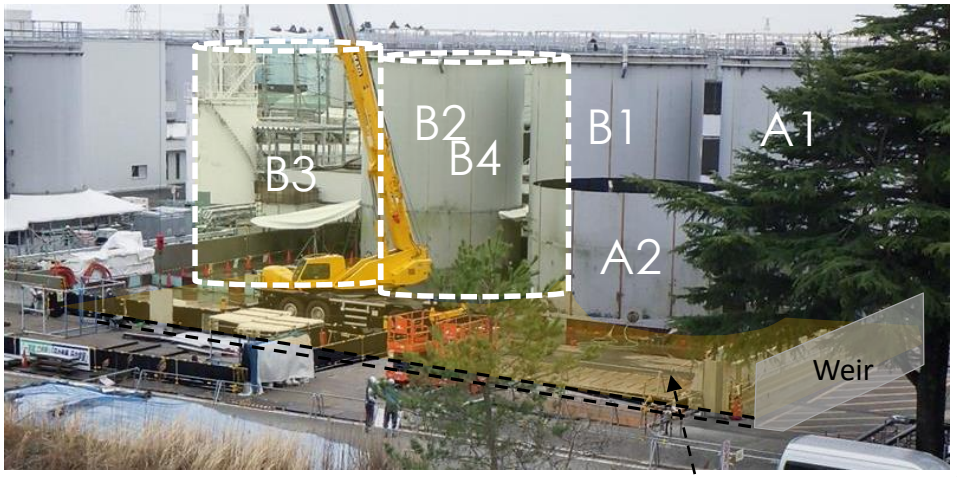
- On November 20, 2025, the J8 area tanks were taken out of service and dismantling began on January 20, 2026.
- Dismantling of the 5th tank was completed on April 10, 2026.
- Dismantling of the 6th tank began on April 13, 2026. Work will be suspended during the warmer months from May through October, and is scheduled to resume around November. ※ The resumption schedule may be subject to change depending on weather conditions and other factors.



＜Tank Dismantling Results＞

Tank number	Dismantling completed date	Tank number	Dismantling completed date
A4	Feb. 17, 2026	A2	–
A3	Feb. 27, 2026	B2	–
A5	Mar. 9, 2026	B1	–
B3	Apr. 3, 2026	A1	–
B4	Apr. 10, 2026		

＜Photographed on January 15, 2026＞



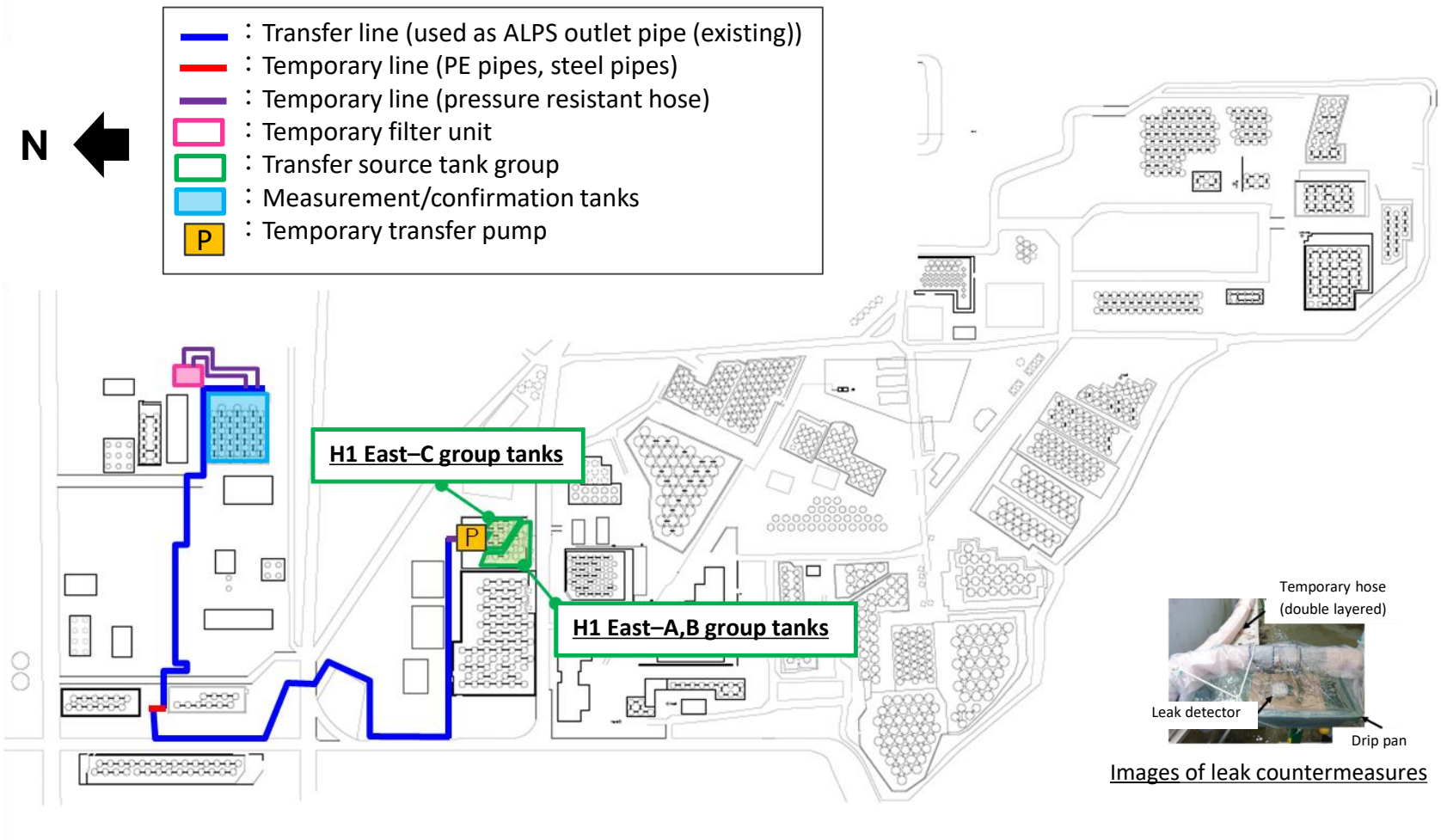
＜Photographed on April 21, 2026＞

The space created by the tank dismantling will be used as a work yard.

Report contents

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

- Transfer of ALPS treated water from H1 East area group A-C to measurement/confirmation facility tank group A in preparation for the discharge of management number: 26-3-21 commenced on April 22, 2026 to May 20, 2026. (Transferred volume (actual): 7,780 m³ (H1 East area group C: 3,580 m³, H1 East area group A/B: 4,200 m³)) Circulation/agitation of the tanks commenced on May 22, 2026 and samples will be taken on May 29, 2026.
- Transfer of ALPS treated water from H1 East area group A/B to measurement/confirmation facility tank group C in preparation for the discharge of management number: 26-4-22 was commenced from May 22, 2026. Transfer is scheduled to be completed around early June 2026.



Images of leak countermeasures

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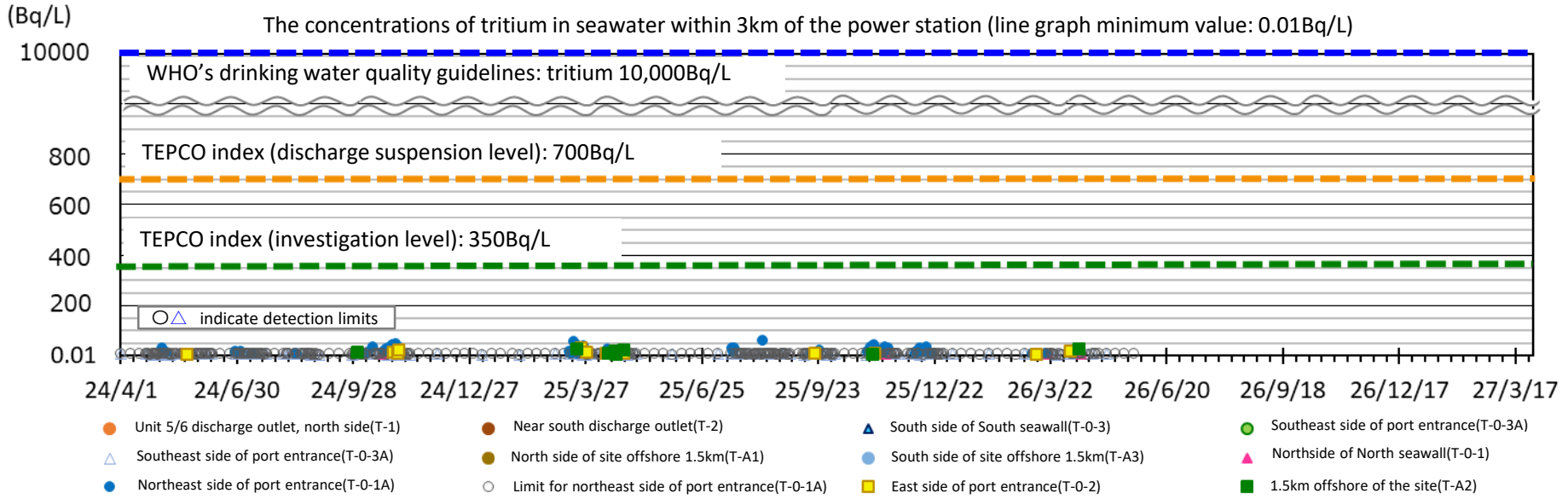
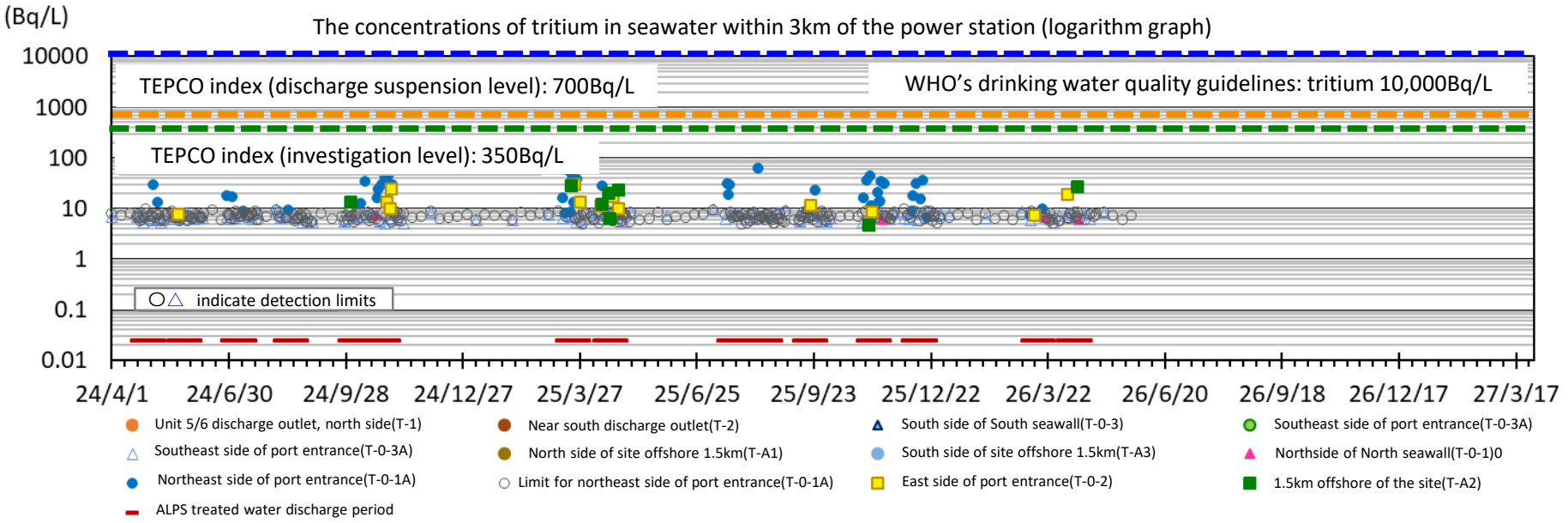
[Reference] Sea area monitoring history (1/2)　quick monitoring

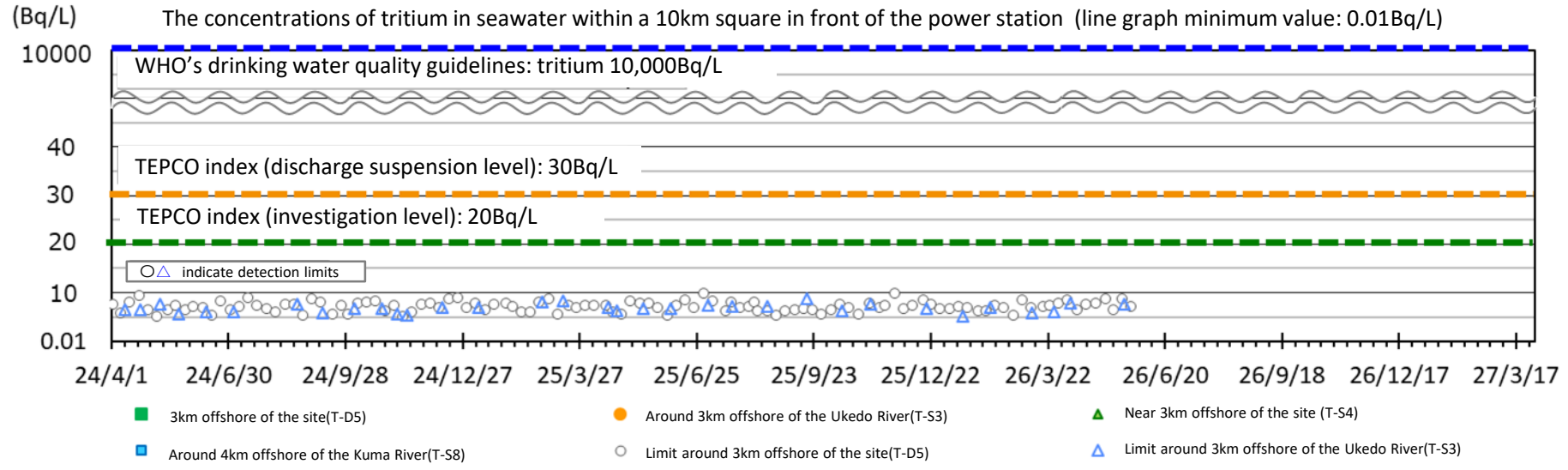
Within 3km of the power station

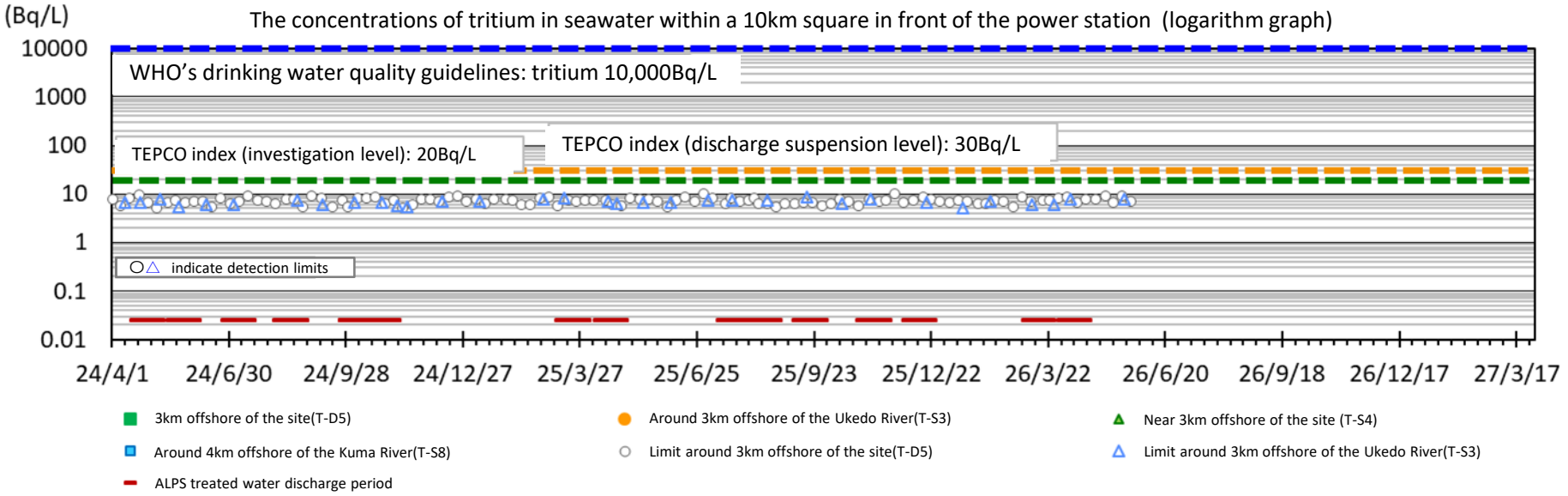




[Reference] Sea area monitoring history (2/2)　quick monitoring

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.

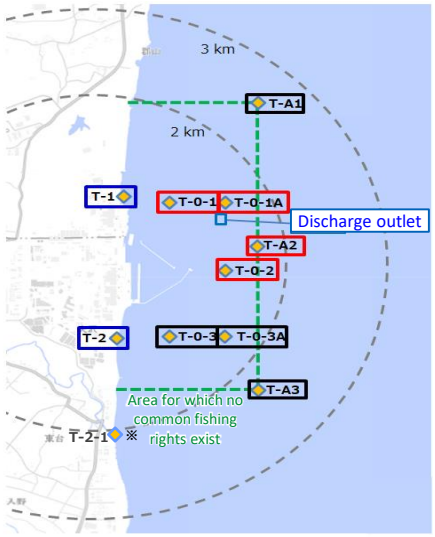


Figure 1: Specimen sampling locations within 3km of the power station (near the discharge outlet)

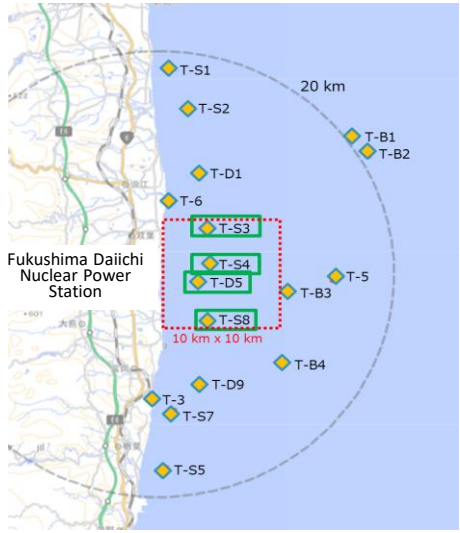


Figure 2: Specimen sampling locations within a 10km square in front of the power station

: Monitoring points used to obtain quick results (10 locations)
Index (Discharge suspension level) 700Bq/L

※ Alternative location if safety cannot be secured at T-2

: Monitoring points used to obtain quick results (4 locations)
Index (Discharge suspension level) 30Bq/L

	【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
	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 Since the commencement of discharge in August 2023, the monitoring plan was changed on December 26, 2023 in light of actual measurements taken during discharge. (Announced on December 25, 2023)