Outline of Decommissioning, Contaminated Water and Treated Water Management

February 26, 2026
Secretariat of the Team for Countermeasures for Decommissioning, Contaminated Water and Treated Water

Main decommissioning work and steps

Fuel removal from the spent fuel pool was completed on December 22, 2014, at Unit 4 and on February 28, 2021, at Unit 3.
Trial fuel debris retrieval at Unit 2 commenced on September 10, 2024, and a milestone of the Mid-and-Long-Term Roadmap "Commencing fuel debris retrieval at the first Unit" was achieved.
Work continues sequentially toward the start of fuel removal from Units 1 and 2 and fuel debris (Note 1) retrieval from Units 1-3.

(Note 1) Fuel assemblies that melted during the accident along with nearby metal materials, etc.

<Milestones in the Mid-and-Long-Term Roadmap>

Units 1-6	Completion of fuel removal	Within 2031
Unit 1	Start of fuel removal	FY2027 - FY2028
Unit 2	Start of fuel removal	FY2024 - FY2026

Fuel Removal from SFP
Rubble removal etc. (Unit 1) → Installation of fuel-removal equipment (Unit 2) → Fuel removal → Storage/ Transportation (Units 3 and 4)

Fuel Debris Retrieval
Understanding the situation inside the PCV/Consideration of retrieval methods (Units 1 and 3) → Fuel debris retrieval (Unit 2) → Storage/ Transportation

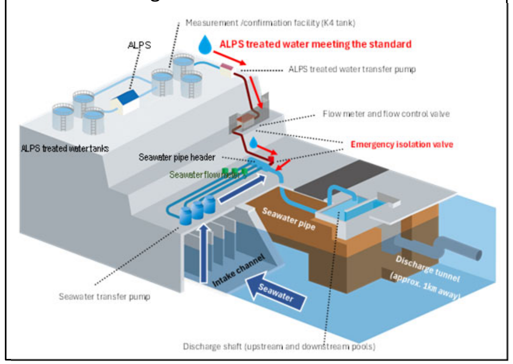
Dismantling Facilities
Scenario development & technology consideration → Design and manufacture of devices/equipment → Dismantling

Measures for treated water

Handling of ALPS treated water

Regarding the discharge of ALPS treated water into the sea, TEPCO must comply with regulatory and other safety standards to safeguard the public, the surrounding environment and agricultural, forestry and fishery products. To minimize adverse impacts on reputation, ongoing efforts will continue, including enhanced monitoring, ensuring objectivity and transparency by engaging with third-party experts and having safety checked by the IAEA. Moreover, accurate information will be disseminated with full transparency.

Flow of discharge of ALPS treated water into the sea



Contaminated water management - triple-pronged efforts -

(1) Efforts to promote contaminated water management based on the three basic policies

① "Removing" the contamination source ② "Redirecting" groundwater from the contamination source
③ "Preventing leakage" of contaminated water

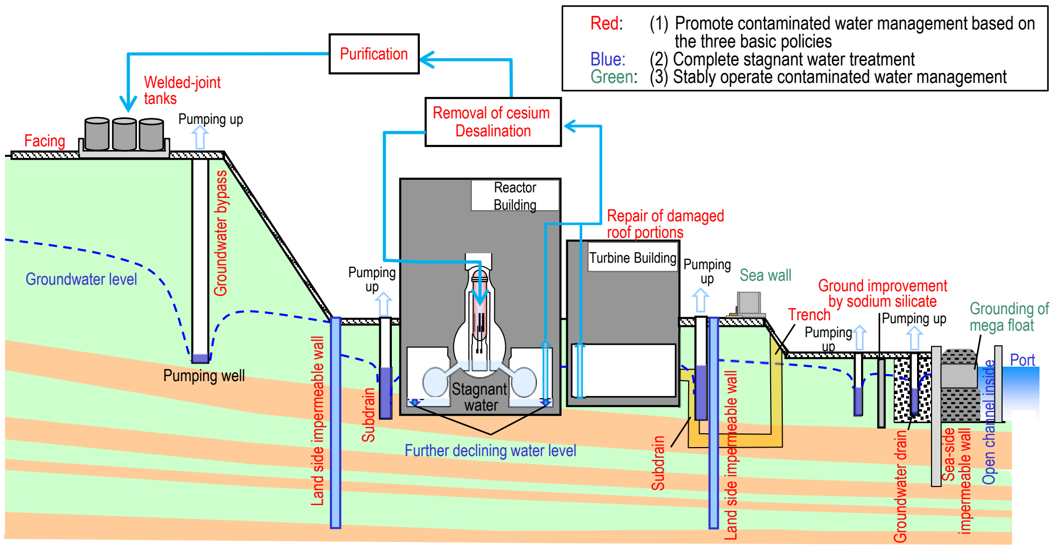
- For stagnant water in buildings (contaminated water), first, cesium and strontium are reduced by the cesium absorption apparatuses (SARRY and KURION). Then, stagnant water in buildings is treated by the multi-nuclide removal system (ALPS) and stored in welded-joint tanks.
- Multi-layered contaminated water management measures, including land-side impermeable walls and subdrains, have stabilized the groundwater at a low level and the increased contaminated water generated during rainfall is being suppressed by repairing damaged portions of the building roofs facing onsite. Through these measures, the amount of contaminated water generated has been suppressed and reduced from approx. 540 m^3/day (in May 2014) before implementing measures to approx. 70 m^3/day (in FY2024). It was confirmed that the milestone of "suppressing the amount of contaminated water generated to 100 m^3/day or less during average rainfall within FY2025," which was achieved in FY2023, has been maintained in FY2024.
- Measures will proceed to further reduce and supress the amount of contaminated water generated to approx. 50-70 m^3/day by FY2028.

(2) Efforts to complete stagnant water treatment

- To reduce stagnant water levels in buildings as planned, work to install additional stagnant water transfer equipment will proceed.
- In 2020, treatment of stagnant water in buildings was completed, except for the Units 1-3 Reactor Buildings, Process Main Building and High-Temperature Incinerator Building.
- While assessing the dust impact, measures to reduce the stagnant water level were implemented. In March 2023, the target water level in each building was achieved. For the Units 1-3 Reactor Buildings, "reducing stagnant water in the Reactor Buildings to about half the amount at the end of 2020 during the period FY2022-2024" was achieved.
- Measures are being implemented for the reduction of radiation dose and stabilization of zeolite sandbags on the basement floors of the Process Main Building and High-Temperature Incinerator Building.

(3) Efforts to stably operate contaminated water management

- As part of the tsunami countermeasures, openings in buildings were closed and work to install sea walls was completed. As countermeasures for heavy rain, sandbags are being installed to suppress direct inflow into buildings while drainage channel enhancements and other measures are being implemented as planned.



Progress Status and Future Challenges of the Mid-and-Long-Term Roadmap toward Decommissioning of TEPCO Holdings Fukushima Daiichi Nuclear Power Station (Outline)

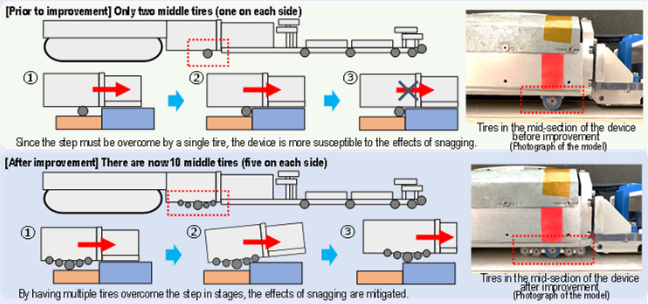
Progress status

◆ The temperatures of the Reactor and the Primary Containment Vessel of Units 1-3 have been maintained stable.
There was no significant change in the concentration of radioactive materials newly released from Reactor Buildings into the air. It was concluded that the comprehensive cold shutdown state had been maintained.

Unit 3 PCV internal investigation (non-submerged area) using micro-drones

Regarding the Unit 3 investigation using micro-drones, during the operational verification of the investigation equipment in December 2025, the installation device ceased advancing within the X-53 penetration. To identify the cause, a "new installation piping model" reflecting the results from the inspection inside the installation pipe was constructed off-site. A running test was conducted on an "installation device model" with specifications largely matching the actual unit. This revealed that some wheels became snagged on a step midway. This is presumed to be due to the installation device becoming cantilevered at the front during passage through the penetration as a result of misalignment, causing significant downward force on the wheels. After implementing countermeasures such as wheel modifications, verification tests confirmed the device could successfully traverse the step, validating the effectiveness of these countermeasures. As further countermeasures, procedures were added for situations where the crawler cannot move under its own power: forward movement using a push bar and backward movement using a cable drum for pulling assistance. High-grip components were also attached to the crawler's contact surface to improve grip force.

The investigation is scheduled to commence once preparatory work and final pre-investigation checks are completed.

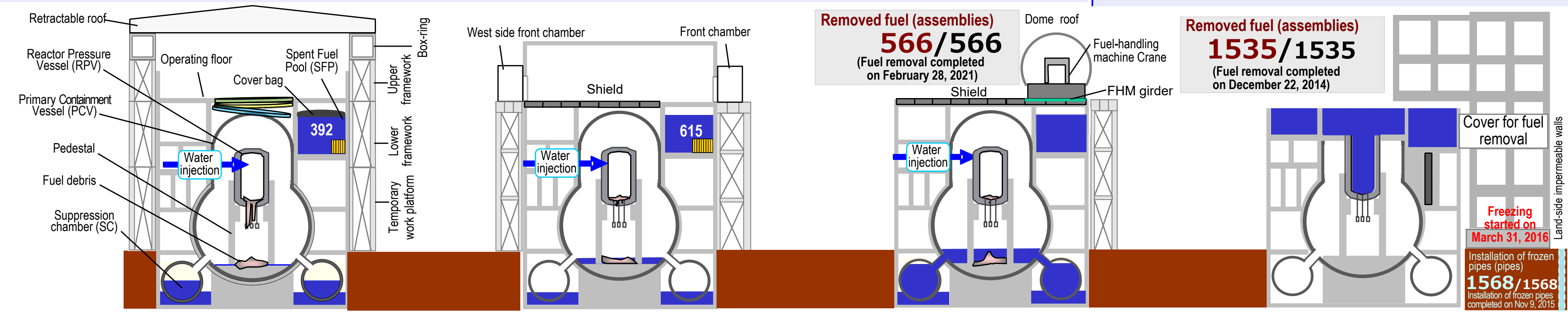


Comparison before and after improving the installation device

Unit 2: The status of PCV Internal investigation and fuel debris trial retrieval

Currently, mockup verification of the robotic arm is being conducted at the JAEA Naraha Center for Remote Control Technology Development. Due to issues with the telescopic device's camera, irradiation tests were performed during verification. Some cameras failed to demonstrate radiation resistance matching the manufacturer's specifications, leading to their partial replacement with cameras that have a proven track record. Irradiation tests were conducted on the replacement cameras, confirming they meet the manufacturer's radiation resistance specifications. Since the radiation resistance of the replacement cameras is lower than the planned dose for on-site operations, operations will continue by replacing them as needed via remote manipulation using the manipulator.

Verification tests will proceed, and the robotic arm will be transported to the Fukushima Daiichi Nuclear Power Station by the end of March 2026. A further 3 to 4 months will then be required to install the equipment. The PCV internal investigation and debris retrieval are anticipated to commence around summer 2026.

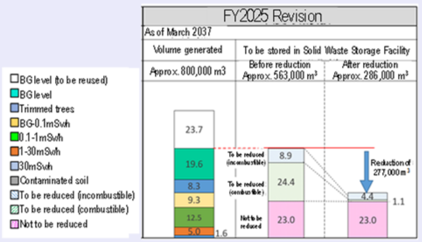


Revision of the Solid Waste Storage Management Plan (FY2025 version)

Regarding the "Solid Waste Storage Management Plan for Tokyo Electric Power Company Holdings, Inc. Fukushima Daiichi Nuclear Power Station," which was formulated based on the Mid-and-Long-Term Roadmap, an evaluation aligned with actual conditions was conducted and a revision was issued.

Considering the preparatory work for debris retrieval at Unit 3, an additional waste generation volume of approximately 50,000 m³ was separately accounted for. The plan also reflected the projected restart date for the Additional Radioactive Waste Incinerator (August 2026), currently undergoing restoration work, and the projected phased operational start date for Solid Waste Storage Building No. 11 (May 2028), currently undergoing preparatory work such as excavation. Furthermore, considering the properties, radiation dose and storage conditions of rubble currently in temporary outdoor storage, the prioritization of rubble removal from temporary storage was based on the need to prevent radioactive material leakage and ensure fire protection.

The volume of waste expected to be generated by the end of FY2036, considering volume reduction, is approximately 286,000 m³. This exceeds the storage capacity of the 11th Solid Waste Storage Facility (approx. 282,000 m³), but storage is expected to be possible until FY2035. Planning will proceed for the installation of the 12th Solid Waste Storage Facility and beyond. Furthermore, the estimated volume of waste requiring storage in the Solid Waste Storage Facility by the end of FY2028 will be approx. 207,000 m³, while the storage capacity of the Solid Waste Storage Facility will be approx. 216,000 m³.



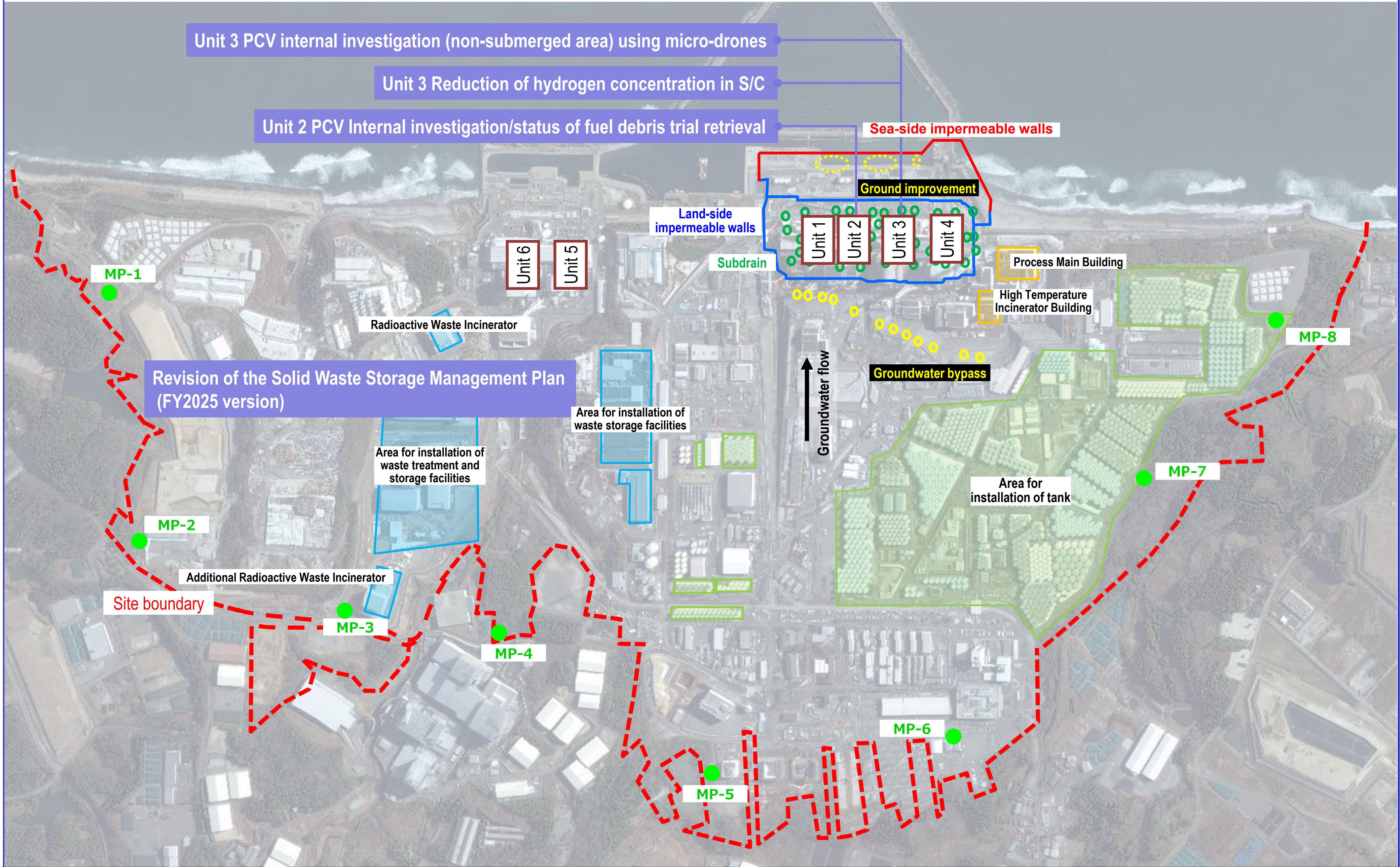
Estimated volume generated in around the next decade

Unit 3 Reduction of hydrogen concentration in S/C

High concentrations of hydrogen-containing gas, generated by reactions between fuel rods and steam during the accident and by radiolysis of water, have been confirmed to be stagnant inside the Unit 3 Suppression Chamber (S/C). As lowering of the water level proceeds to enhance the seismic resistance of the Unit 3 Primary Containment Vessel (PCV), it is necessary to reduce the hydrogen concentration of this stagnant gas. Therefore, gas purging in the S/C commenced in December 2023, and by April 2025, discharge of the trapped gas was completed, excluding gas that cannot be discharged due to the structure at the top of the S/C. From July 2025, work began to reduce the hydrogen concentration of the gas that could not be discharged from the top of the S/C by diluting it with nitrogen. This work was completed on February 4, 2026, reducing the hydrogen concentration to 2%, below the flammable limit (4%).

Going forward, hydrogen concentration inside the S/C is expected to gradually increase due to water radiolysis. Hydrogen concentration measurements will therefore be conducted periodically until the PCV and S/C are connected. The timing for lowering the PCV (S/C) water level will be adjusted based on the progress of the PCV internal inspection and other factors.

Major initiatives – Locations on site

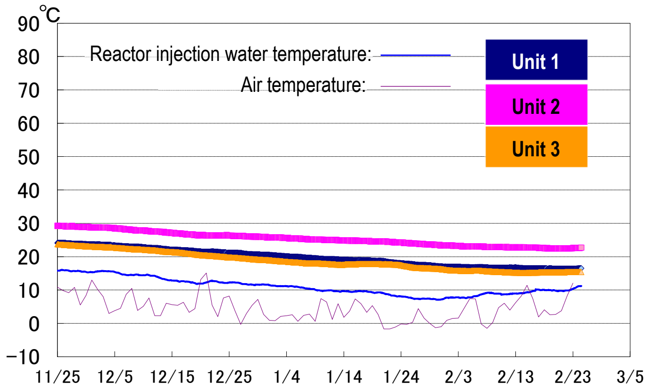


Provided by Japan Space Imaging Corp., photo taken on January 14, 2024
Product (C) [2024] Maxar Technologies.

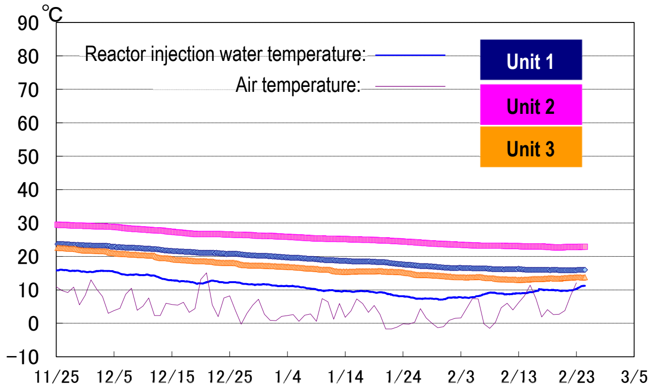
I. Confirmation of the reactor conditions

Temperatures inside the reactors

Through continuous reactor cooling by water injection, the temperatures of the Reactor Pressure Vessel (RPV) bottom and the Primary Containment Vessel (PCV) gas phase were maintained as shown below for recent, though they varied depending on the unit and location of the thermometer.

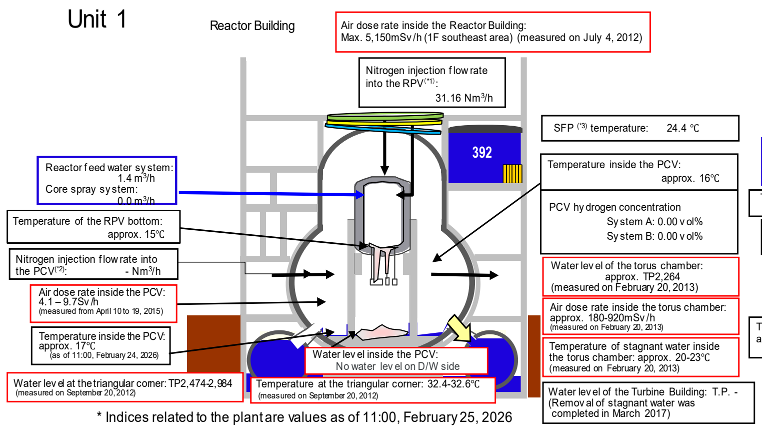


RPV bottom temperatures (recent quarter)

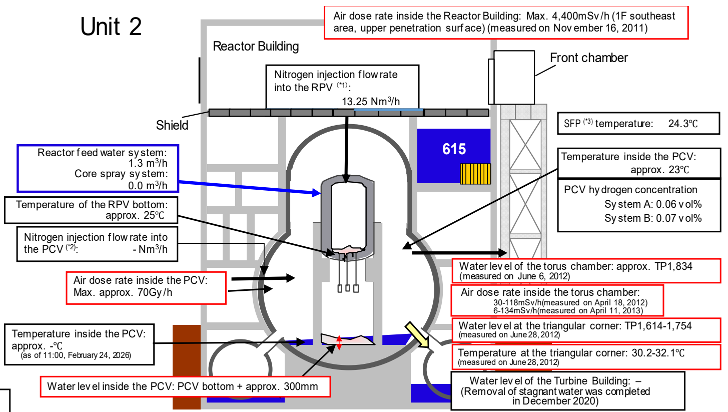


PCV gas phase temperatures (recent quarter)

*1 The trend graphs show part of the temperature data measured at multiple points.
*2 A part of data could not be measured due to maintenance and inspection of the facility and other work.



* Indices related to the plant are values as of 11:00, February 25, 2026



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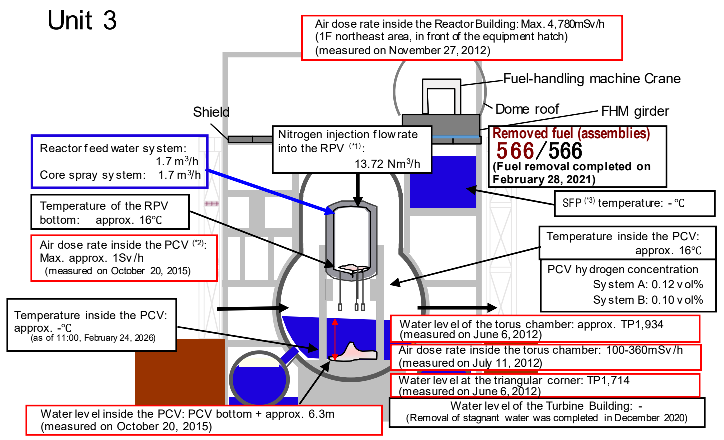


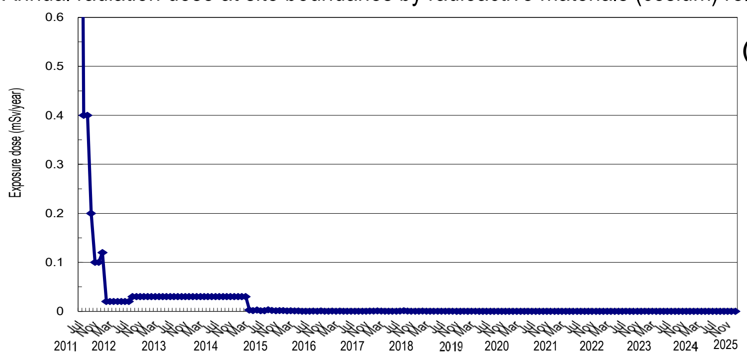
* Indices related to the plant are values as of 11:00, February 25, 2026

(*1) RPV (Reactor Pressure Vessel)
(*2) PCV (Primary Containment Vessel)
(*3) SFP (Spent Fuel Pool)

Release of radioactive materials from the Reactor Buildings

As of January 2026, the concentration of radioactive materials newly released from Reactor Building Units 1-4 into the air and measured at the site boundary was evaluated at approx. 6.1 $\times 10^{-12}$ Bq/cm³ and 7.8 $\times 10^{-12}$ Bq/cm³ for Cs-134 and -137 respectively, while the radiation exposure dose due to the release of radioactive materials there was less than 0.00003 mSv/year.

Annual radiation dose at site boundaries by radioactive materials (cesium) released from Reactor Building Units 1-4



(Reference)

- The concentration limit of radioactive materials in the air outside the surrounding monitoring area:
  [Cs-134]: 2 x 10^{-5} Bq/cm³
  [Cs-137]: 3 x 10^{-5} Bq/cm³
- Data of Monitoring Posts (MP1-MP8).
  Data of Monitoring Posts (MPs) measuring the air dose rate around the site boundary showed 0.280–0.960 μSv/h (January 28 – February 24, 2026).
  To measure the variation in the air dose rate of MP2-MP8 more accurately, work to improve the environment (trimming trees, removing surface soil and shielding around the MPs) was completed.

Note 1: Different formulas and coefficients were used to evaluate the radiation dose in the facility operation plan and monthly report. The evaluation methods were integrated in September 2012. As the fuel removal from the spent fuel pool (SFP) commenced for Unit 4, the radiation exposure dose from Unit 4 was added to the items subject to evaluation since November 2013. The evaluation has been changed to a method considering the values of continuous dust monitors since FY2015, with data to be evaluated monthly and announced the following month.
Note 2: Radiation dose was calculated using the evaluation values of release amount from Units 1-4 and Units 5 and 6. The radiation dose of Unit 5 and 6 was evaluated based on expected release amount during operation until September 2019 but the evaluation method was reviewed and changed to calculate based on the actual measurement results of Units 5 and 6 from October.
Note 3: Dose assessment has been changed since July 2024 due to the change of standard meteorology, etc. in the implementation plan (effective July 8, 2024).

Other indices

There was no significant change in indices, including the pressure in the PCV and the PCV radioactivity density (Xe-135) for monitoring criticality, nor was any anomaly in the cold shutdown state or criticality sign detected.

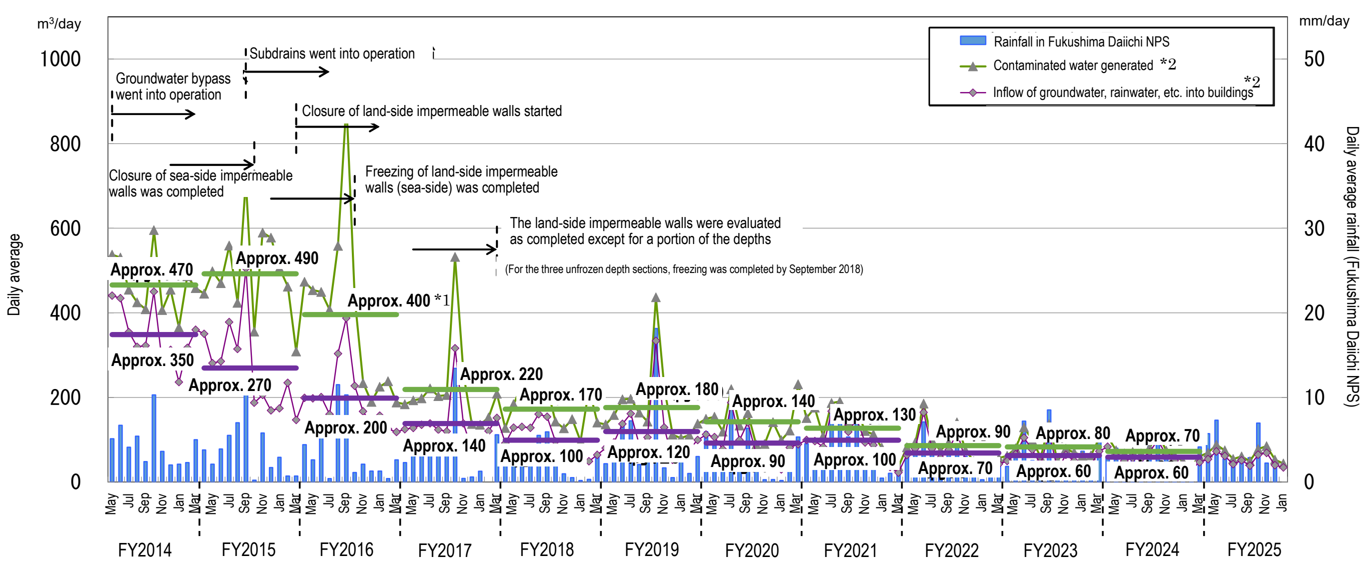
Based on the above, it was confirmed that the comprehensive cold shutdown state had been maintained and the reactors remained in a stabilized condition.

II. Progress status by each plan

Measures for contaminated water and treated water

➢ Status of contaminated water generated

- Multi-layered contaminated water management measures, including land-side impermeable walls and subdrains, have stabilized the groundwater at a low level and the increased contaminated water generated during rainfall is being suppressed by repairing damaged portions of building roofs facing onsite. Through these measures, the generation of contaminated water has been suppressed and reduced from approx. 540 m³/day (in May 2014) before implementing measures to approx. 70 m³/day (in FY2024). It was confirmed that the milestone of "suppressing the amount of contaminated water generated to 100 m³/day or less during average rainfall within FY2025," which was achieved in FY2023, has been maintained in FY2024.
- Measures will proceed to further reduce the amount of contaminated water generated and suppress to approx. 50-70 m³/day by FY2028.



*1 Values differ from those announced at the 20th Committee on Countermeasures for Contaminated Water Treatment (held on August 25, 2017) because the method of calculating the contaminated water volume generated was reviewed on March 1, 2018. Details of the review are described in the materials for the 50th and 51st meetings of the Secretariat of the Team for Countermeasures for Decommissioning and Contaminated Water Treatment.
*2: The monthly daily average is derived from the daily average from the previous Thursday to the last Wednesday, which is calculated based on the data m

Figure 1: Changes in contaminated water generated and inflow of groundwater and rainwater into buildings

Operation of the Water-Treatment Facility Special for Subdrains & Groundwater drains

- At the Water-Treatment Facility Special for Subdrains & Groundwater drains, releases started from September 14, 2015, and up until February 17, 2026, 2,873 releases had been completed.
  The water quality of all temporary storage tanks satisfied the operational target.

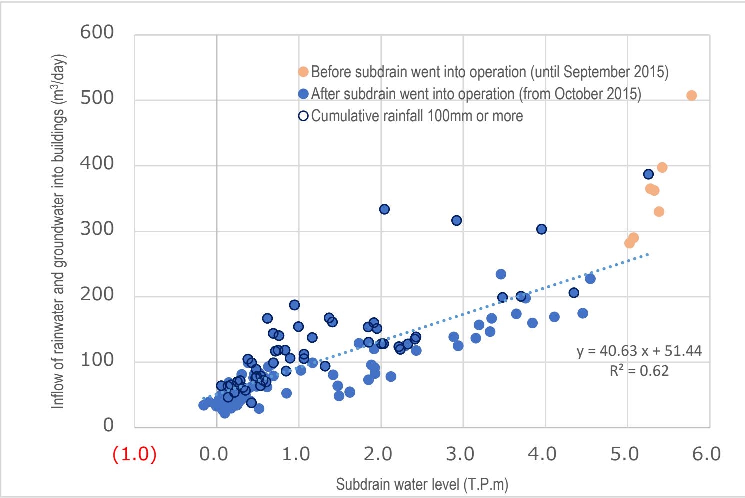


Figure 2: Correlation between inflow such as groundwater and rainwater into buildings and the water level of Units 1-4 subdrains

Implementation status of facing

- Facing is a measure that involves asphalting the on-site surface to reduce the radiation dose, prevent rainwater from infiltrating the ground, and reduce the amount of underground water flowing into buildings. As of the end of January 2026, 97% (1,410,000 m²) of the planned area (1,450,000 m²) on site had been completed. For the area inside the land-side impermeable walls, facing proceeds after appropriate yard coordination from the zones in which facing can be implemented without affecting the decommissioning work. As of the end of January 2026, 55% (30,000 m²) of the planned area (60,000 m²) had been completed.

Status of the groundwater level around buildings

- For groundwater levels within the land-side impermeable walls, the difference between the inside and outside has remained constant, though the groundwater level on the mountain side varied due to rainfall. The groundwater level of the groundwater drain observation well remained sufficiently lower than the ground surface, at around T.P.+1.4m (the height of the ground surface: T.P.+2.5m).
- Regarding the subdrains of Units 1-4, pumping volumes varied with precipitation. The pumping amount in the T.P.+2.5m area remained constant after the facing in this area was completed.

Operation of the multi-nuclide removal system and other water-treatment facilities

- Regarding the multi-nuclide removal system (existing), hot tests with radioactive water were conducted (System A: from March 30, 2013, System B: from June 13, 2013, System C: from September 27, 2013). On March 23, 2022, an inspection prior-to-use certificate was granted by the Nuclear Regulation Authority (NRA) and the entire inspection prior-to-use was completed. For the multi-nuclide removal system (additional), an inspection prior to use certificate was granted by the NRA on October 12, 2017. Regarding the multi-nuclide removal system (high-performance), hot tests using radioactive water were conducted from October 18, 2014. On March 2, 2023, an inspection prior to use certificate was granted by the NRA and the entire inspection prior to use was completed.
- Treatment operations comprising the removal of strontium by cesium-adsorption apparatus (KURION), the secondary cesium-adsorption apparatus (SARRY) and the third cesium-adsorption apparatus (SARRY II) continued. Up until February 12, 2026, approx. 809,000 m³ had been treated.

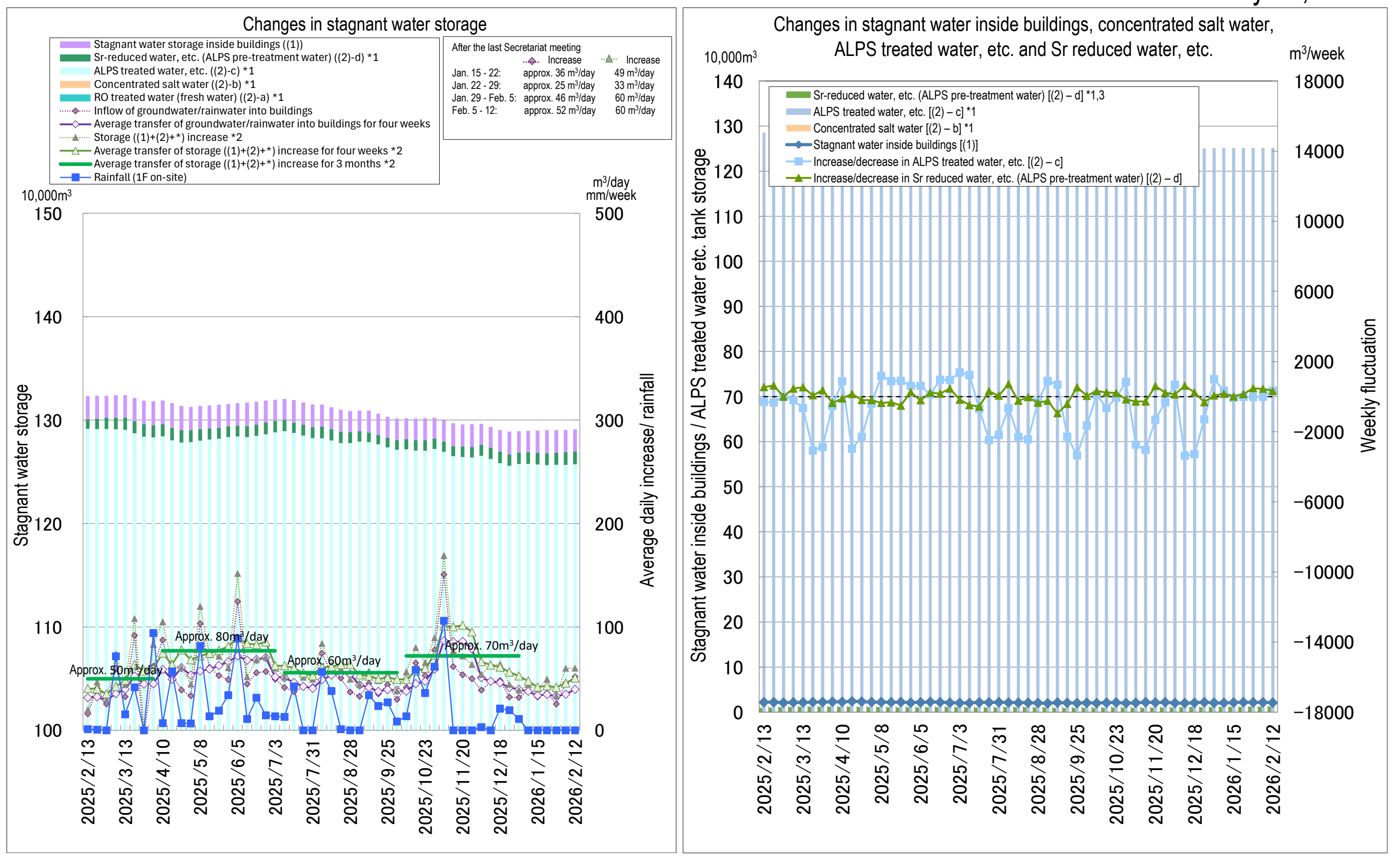
Risk reduction of strontium-reduced water

- To mitigate risks associated with strontium-reduced water, treatment using the existing, additional, and high-performance multi-nuclide removal systems is underway. Up until February 12, 2026, approx. 972,000 m³ had been treated.

Storage status of stagnant water and amount of ALPS treated water stored in tanks

- The volume of ALPS treated water, etc. was approx. 1,254,297 m³ as of February 12, 2026.
- The total volume of ALPS treated water discharged into the sea since discharges commenced on August 24, 2023, was approx. 133,321 m³ as of the completion of the sixth discharge in FY2025.

As of February 12, 2026



(1): Stagnant water storage inside buildings (Units 1-4, Process Main Building, High Temperature Incinerator Building, Waste Liquid Supply Tank, SPT (A), SPT (B), Units 1-3 CST, buffer tank)
(2): Units 1-4 tank storage ([(2)-a RO-treated water (fresh water)] + [(2)-b Concentrated salt water] + [(2)-c ALPS treated water, etc.] + [(2)-d Sr-reduced water, etc. (ALPS pre-treatment water)]
*: Water amount from tank bottom to water-level gauge 0% (DS)
*1: Water amount for which the water-level gauge indicates 0% or more
*2: Calculated in the method of contaminated water generated [(Inflow of groundwater/rainwater into buildings) + (other transfer) + (chemical injection into ALPS)], amount of ALPS treated water discharged was not taken into account.
*3: Amount of Sr-reduced water and others increased and decreased depending on the operation status of facilities due to clog of the cross-flow filter for the multi-nuclide removal system.

Figure 3: Status of stagnant water storage

Status of discharge of ALPS treated water

As of February 24, 2026

Measurement object	Requirement and operation target	Measurement results	Compliance with requirement
[TEPCO] Tritium concentration in seawater (sea-area monitoring at 4 points within 3 km of the Power Station)	・Discharge suspension level: 700 Bq/L or less ・Investigation level: 350 Bq/L or less	(Sampled on February 23) ・Below the lower detection limit (less than 5.2 – 5.8 Bq/L)	○ ○
[TEPCO] Tritium concentration in seawater (sea-area monitoring at 1 point within a 10 km square area in front of the Power Station)	・Discharge suspension level: 30 Bq/L or less ・Investigation level: 20 Bq/L or less	(Sampled on February 23) ・Below the lower detection limit (less than 5.2 Bq/L)	○ ○
[Ministry of the Environment] Tritium concentration in seawater (at 3 points off the coast of Fukushima Prefecture)	・National safety requirement: 60,000 Bq/L ・WHO drinking water guidelines: 10,000 Bq/L	(Sampled on January 21) ・Below the lower detection limit (less than 9 Bq/L)	○ ○
[Fisheries Agency] Tritium concentration in marine products (flounder)	-	(Sampled on February 17) ・Below the lower detection limit (less than 10.0 Bq/kg)	○
[Fukushima Prefecture] Tritium concentration in seawater (at 9 points around the Fukushima Daiichi Nuclear Power Station)	・National safety requirement: 60,000 Bq/L ・WHO drinking water guidelines: 10,000 Bq/L	(Sampled on February 10) ・Below the lower detection limit (less than 3.7 – 3.9 Bq/L)	○ ○

- From December 4 to 22, 2025, the sixth discharge of ALPS treated water into the sea in FY2025 was conducted.
- For sea-area monitoring related to handling ALPS treated water, more tritium measurement points for seawater and fish were established near the power station and off the coast of Fukushima Prefecture and measurements of tritium and Iodine-129 of seaweed near the power station were added from April 20, 2022. As of February 25, 2026, no significant variation had been detected.
- For sea-area monitoring conducted by TEPCO at 4 points within 3 km of the power station, rapid measurements taken of the tritium concentration in the seawater sampled on February 23 showed concentrations under the lower detection limit (less than 5.2–5.8 Bq/L) at all points, which were below TEPCO operation indices of 700 Bq/L (discharge suspension level) and 350 Bq/L (investigation level).
- Regarding sea-area monitoring conducted by TEPCO at 1 point within a 10 km square area in front of the Power Station, rapid measurements taken of the tritium concentration in the seawater sampled on February 23 showed concentrations under the detection limit (less than 5.2 Bq/L), which was below the TEPCO operation indices of 30 Bq/L (discharge suspension level) and 20 Bq/L (investigation level).
- The rapid measurement results obtained by each organisation were as follows:
  Ministry of the Environment: The analytical results (obtained via rapid measurements) for seawater sampled on January 21 at 3 points off the coast of Fukushima Prefecture showed tritium concentrations below the lower detection limit (less than 9 Bq/L) at all sampling points, which would have no adverse impact on human health and the environment.
  Fisheries Agency: Rapid analytical results for tritium in flounder sampled on February 17 showed tritium concentrations below the lower detection limit (less than 10.0 Bq/kg) in all samples.
  Fukushima Prefecture: On February 10, tritium concentrations in seawater at 9 sampling points around the Fukushima Daiichi Nuclear Power Station showed concentrations below the lower detection limit (less than 3.7 – 3.9 Bq/L) at all sampling points, which would have no adverse impact on human health and the environment.

➢ Progress status of handling of zeolite sandbags and others

- Regarding high-dose zeolite and activated carbon sandbags (hereinafter referred to as “zeolite sandbags and others”) on the lowest floor (second basement floor) of the Process Main Building (PMB) and the High Temperature Incinerator Building (HTI), collection is planned to reduce risks. Examination of collection methods is underway, focusing on underwater collection, which is expected to provide a water shielding effect.
- Collection of zeolite sandbags and others on the lowest floor of PMB and HTI is divided into two steps (“accumulation” and “container enclosure”) to conduct the work effectively.
- As sandbags are prone to degradation and cannot be moved as they are, basically the zeolite and other materials are transferred via pump together with stagnant water.
- On-site accumulation of zeolite sandbags commenced from March 2025 at HTI, and trial accumulation of about three rows was completed. Regarding the remaining zeolite sandbags, after removing obstructions and crushing sandbags, zeolite is transferred to the planned zeolite accumulation site.
- The ROV for accumulation was inserted in the basement floor and sandbag crushing resumed from January 28, 2026 and was completed on February 4.
- At present (as of February 24, 2026): transfer of approx. 102/146 m^2 of sandbags (including those at corners) was completed (approx. 70%).

Fuel removal from the spent fuel pools

Activities ahead of spent fuel removal from the pool are progressing steadily while ensuring seismic capacity and safety.

➢ Progress of work toward fuel removal at Unit 1

- Ahead of installing a large cover over the Reactor Building, ground assembly and on-site installation were conducted. The last block of the retractable roof was installed on January 13, 2026, and a function check of the retractable roof was performed on January 19, thereby marking the completion of large cover installation.
- In the off-site yard, all ground assembly was completed, and preparations for transporting the overhead crane for rubble removal is underway.
  On site, the overhead crane for rubble removal will be installed once the retractable roof installation is complete.
- Ahead of rubble removal and other work following the installation of the large cover, ancillary facilities for the large cover consisting of the ventilation equipment, dust radiation monitors and other components are installed.
- For Unit 1, rubble inside the large cover will be cleared before fuel removal begins. To mitigate the consequences if the fuel handling machine’s auxiliary hoist falls during rubble clearance, additional protective covering was installed over the spent fuel pool (SFP) gate on June 27, 2025.
- Mock-up testing confirmed that the SFP gate would remain unaffected even if the auxiliary hoist were to fall onto the additional cover.
- The installation of the large cover makes it difficult to directly inject water from outside, such as by using a concrete pump truck. Therefore, to diversify water injection methods in addition to the existing SFP cooling system, an alternative injection line was installed.
- To reduce waste, the fuel handling machine that was installed in Unit 4 in 2013 will be sent back to the manufacturer for modification and will be reused for Unit 1.
- For reuse, parts that cannot be used in their current condition, or those expected to be discontinued or to deteriorate over time will be newly manufactured.
- Disassembly and transport of the Unit 4 fuel handling machine commenced on November 4, 2025, and removal of the platform and the gallery was completed.
- Transportation of all parts to the factory will be completed within FY2025.
- Installing a large cover required the process to be extended. Considering the fact that the detailed dose impact can be confirmed from the operating floor, shielding needs to be added as an additional means of reducing radiation exposure, and the work time needs to be reviewed. Work stoppages have become increasingly common due to bad weather, issues with large cranes used on-site, and other factors.
- For starting fuel removal (FY2027-2028), future timelines can be shortened by revising work procedures and other aspects after rubble removal is completed. Accordingly, the start date currently remains unchanged.
- To remove rubble effectively, all rubble conditions need to be fully assessed, considering ongoing uncertainties in the process. The decision on whether to revise the entire timeline will be considered following the mid-stage of Rubble removal.
- Rubble removal is planned after the large cover is completed. However, considering that the upper framework and the box-ring were completed, and consequently the risk of dust scattering on the operating floor was reduced, investigation contributing to the rubble removal plan commenced as preparation for the rubble removal.
- Work platform and heavy machinery for rubble handling need to be placed on the north side of the operating floor. Accordingly, floor investigation commenced from January 15, 2026.
- As preparation for the floor investigation, rubble within the investigation scope is transferred to the accumulation area inside the large cover wall.
- Transfer of rubble is limited inside the large cover wall, not to the outside of the cover.
- Methods to minimize dust scattering are used and existing dust scattering prevention measures will be followed.
- The large cover wall increases the height (25m) of the existing windproof fence (4m). Consequently, wind inside the operating floor is suppressed.
- In the case that an operating floor dust monitor alarm is issued during the investigation, work is immediately suspended, water is sprinkled, and the retractable roof is closed.

➢ Progress of work toward fuel removal at Unit 2

- Work to install runway girders, which support the rails to be used when the fuel handling system moves between the Reactor Building and the front chamber, was completed.
- To ensure visibility during fuel removal, a purification system was installed in the spent fuel pool.
- The fuel removal system was transported from the factory on May 21, 2025, carried into the site of the Fukushima Daiichi Nuclear Power Station on May 24, and hoisted within the work platform for fuel removal on May 30.
- At present, test operation (once-through tests) has been underway since December 12, 2025.
- On October 21, 2025, cleaning of the bottom of the cask pit began using submersible cleaning robots.
- There was much fine sediment, which was vacuumed up to the point where it should have no impact on cask

installation. The task was completed on November 5.

- On November 10, 2025, removal of pieces of sheet-like debris on fuel began using a submersible ROV.
- Removal of pieces of sheet-like debris that may hinder fuel removal was completed on December 12, 2025.
- The sheet-like debris is thin and is presumably deteriorated urethane coating from handrails around the pool, as well as sealant fragments that have peeled off from the building roof.
- During the removal of fuel from Unit 2, the SFP circulated cooling system will be shut down. There is a risk that the resulting steam may impact fuel removal operations. (When the system was shut down for approximately three and a half months during FY2024, the difference in temperature between the water and the air generated steam)
- Therefore, in order to proceed continuously and smoothly with fuel removal, a device for adjusting the water temperature of the SFP has been prepared and stored. As this device can be installed quickly, at the current time, only preparatory tasks are being performed.
- Even when the Unit 2 SFP circulated cooling system is shut down, the operational limit temperature of 65°C noted in the implementation plan will not be exceeded and there will be no safety issues.
- Progress towards work for fuel removal to commence in FY2026 remains steady at present and work will proceed with safety as the priority.

Plans to store, process and dispose of solid waste and decommission of reactor facilities

Promoting efforts to reduce and store waste generated appropriately and R&D to facilitate adequate and safe storage, processing and disposal of radioactive waste

➢ Management status of rubble and trimmed trees

- As of the end of January 2026, the total storage volume for concrete and metal rubble was approx. 413,200 m³ (+500 m³ compared to the end of December with an area-occupation rate of 67%). The total storage volume of trimmed trees was approx. 68,100 m³ (-200 m³, with an area-occupation rate of 39%). The total storage volume of used protective clothing was approx. 10,800 m³ (+300 m³, with an area-occupation rate of 43%). The total storage volume of radioactive solid waste (incinerated ash and others) was approx. 38,600 m³ (a slight increase, with an area-occupation rate of 61%). The decrease in rubble was due to relocation for area preparation, and transfer to eliminate outdoor temporary storage, etc.

➢ Management status of secondary waste from water treatment

- As of February 5, 2026, the total storage volume of waste sludge was 516 m³ (area-occupation rate: 74%), while that of concentrated waste fluid was 9,381 m³ (area-occupation rate: 91%). The total number of stored spent vessels, High-Integrity Containers (HICs) for the multi-nuclide removal system and others, was 5,972 (area-occupation rate: 87%).

Circulating injection cooling

➢ Unit 1 Status of efforts for S/C water level reduction

- To enhance the seismic resistance of the Unit 1 Primary Containment Vessel (PCV), the water level has been lowered since March 2024 by reducing the reactor water injection rate. The water level reached the bottom of the PCV (D/W) in August 2024.
- After the water level stabilized, the natural decline rate of the S/C water level increased from December 2024. Monitoring of the water level decline has continued to date.
- If the current water level decline rate is maintained, the target water level at the S/C center (T.P.2134) is expected to be reached around the end of FY2025.
- After reaching the S/C center (T.P.2134), the natural decline will continue to lower the water level as much as possible, further enhancing seismic resistance.
- During the water level decline process, the CUW piping opening will connect to the PCV (S/C). Therefore, the water level gauge will be removed and the opening sealed beforehand. Even when monitoring via the water level gauge is no longer possible, trend monitoring based on building stagnant water levels will continue.
- The S/C water level reduction will proceed while continuing to confirm the impact on the building stagnant water side.
- The leakage point from the S/C to the R/B northeast triangular corner is assumed to be located in the basement floor of the corner (near the CS/CCS pumps). However, the water level in the R/B northeast triangular corner is managed at T.P. -1650 to -2150, and the setpoint for the surrounding subdrain water level is T.P. -650. meaning building stagnant water is being managed at a sufficiently low level.

Reduction in radiation dose and mitigation of contamination

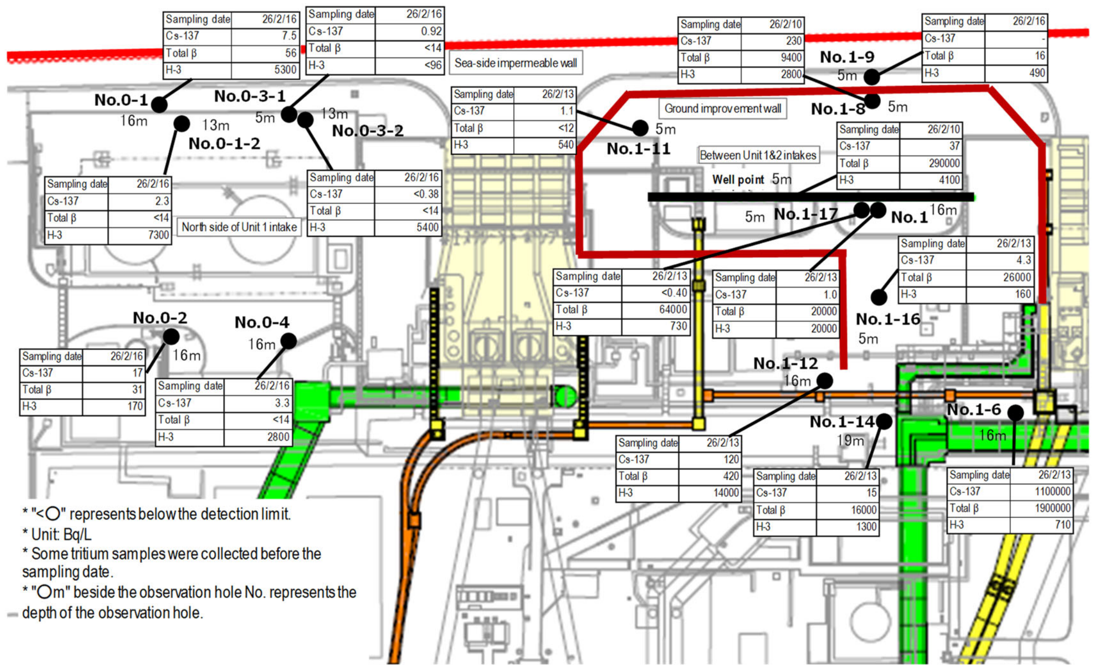
Effective dose-reduction at site boundaries and purification of port water to mitigate the impact of radiation on the external environment

➢ Status of the groundwater and seawater on the east side of Turbine Building Units 1-4

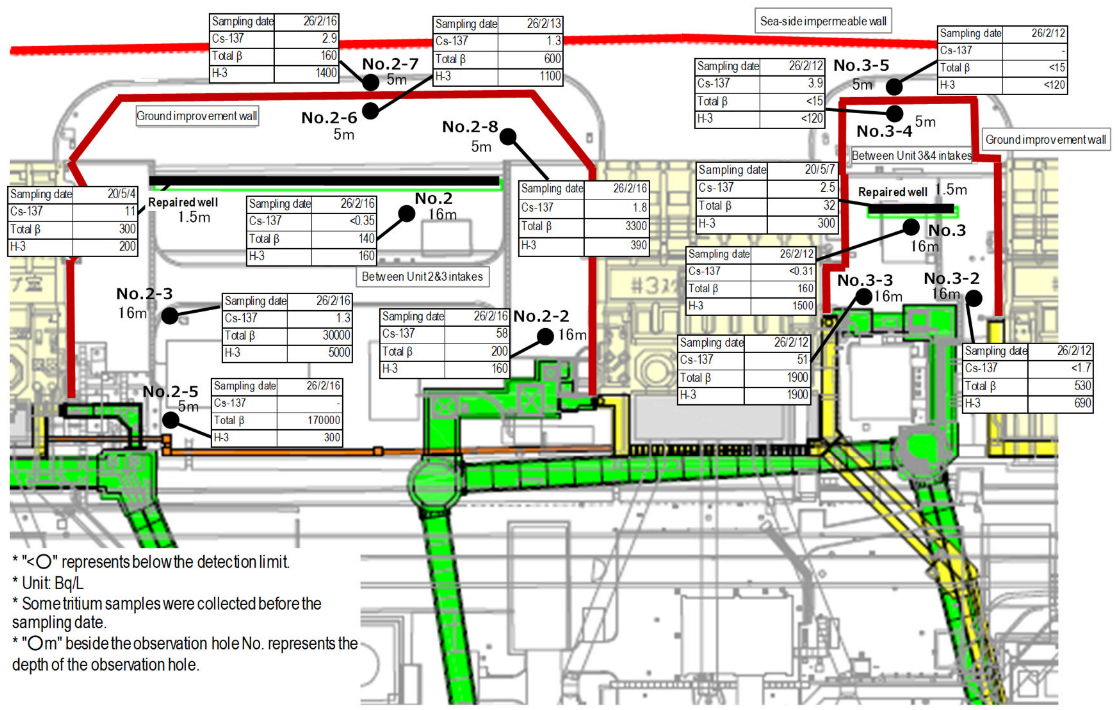
- In the Unit 1 intake north side area, the H-3 concentration was below the legal discharge limit of 60,000 Bq/L at all observation holes and remained constant or has been declining overall. The concentration of total β radioactive materials has generally remained constant but temporarily increased from April 2020 and is even currently increasing or declining at a low concentration at observation holes including Nos. 0-1, 0-1-2, 0-2, and 0-3-2. The trend continues to be carefully monitored.
- In the area between the Units 1 and 2 intakes, the H-3 concentration has remained below the legal discharge limit of 60,000 Bq/L at all observation holes. It has been increasing or declining at Nos. 1-14 and 1-17 but has otherwise remained constant or been declining overall. The concentration of total β radioactive materials has remained constant overall but has been increasing at No. 1-6 and increasing or declining at low concentration at Nos. 1-8, 1-9, 1-11, 1-12 and 1-14. The trend continues to be carefully monitored.
- In the area between the Units 2 and 3 intakes, the H-3 concentration has been below the legal discharge limit of 60,000 Bq/L at all observation holes. It has remained constant or been declining at many observation holes overall. The concentration of total β radioactive materials has remained constant overall but has been increasing and a larger fluctuation was seen at No. 2-5. The trend continues to be carefully monitored.
- In the area between the Units 3 and 4 intakes, the H-3 concentration has been below the legal discharge limit of 60,000 Bq/L at all observation holes and remained constant or been declining overall. The concentration of total β radioactive materials has remained constant overall but has been increasing or declining at Nos. 3-4 and 3-5. The trend continues to be carefully monitored.
- In the groundwater on the east side of the Turbine Buildings, as with the total β radioactive materials, the concentration of cesium has also remained constant across the area overall, but has been increasing or declining at observation holes with low concentrations, and exceeded the previous highest record at some observation holes. Investigations will continue, including ascertaining the impact of rainfall.
- The concentration of radioactive materials in drainage channels has remained constant overall, despite increasing during rainfall. In Drainage Channel D, drainage of the low-dose area on the west side of the site started passing from August 30, 2022. It has remained low, despite concentrations of cesium and total β radioactive materials increasing during rainfall. From November 29, 2022, continuous monitors were installed and drainage around the Units 1 and 2 switch yard started passing.
- In the open channel area of the seawater intake for Units 1 to 4, the concentration of radioactive materials in seawater has remained below the legal discharge limit and been declining long term, despite the temporary increases in Cs-137 and Sr-90 observed during rainfall. They have also been declining following the completed installation and the connection of steel pipe sheet piles for the sea-side impermeable walls. The concentration of Cs-137 remained slightly higher in front of the south-side impermeable walls and slightly lower on the north side of the east breakwater since March 20, 2019, when the silt fence was transferred to the center of the open channel due to mega float-related construction.
- In the port area, the concentration of radioactive materials in seawater has remained below the legal discharge limit and been declining long term, despite temporary increases in Cs-137 and Sr-90 observed during rainfall. They have remained below the level of those in the Units 1-4 intake open channel area and been declining following the

completed installation and connection of steel pipe sheet piles for the sea-side impermeable walls.

・ In the area outside the port, regarding the concentration of radioactive materials in seawater, those of Cs-137 and Sr-90 declined and remained low after steel pipe sheet piles for the sea-side impermeable walls were installed and connected. For Cs-137 concentrations, a temporary increase was sometimes observed on the north side of the Units 5 and 6 outlets and near the south outlet due to the influence of weather, marine meteorology and other factors. For Sr-90 concentrations, variation was observed in FY2021 in the area outside the port (north and south outlets). Monitoring of the tendency continues, including the potential influence of weather, marine meteorology and others. During the period for which ALPS treated water was discharged, the tritium concentration increased at the sampling point near the discharge outlet, but this was considered within the expected range based on oceanic dispersion simulation results.



<Unit 1 intake north side, between Unit 1 and 2 intakes>



<Between Unit 2 and 3 intakes, between Unit 3 and 4 intakes>

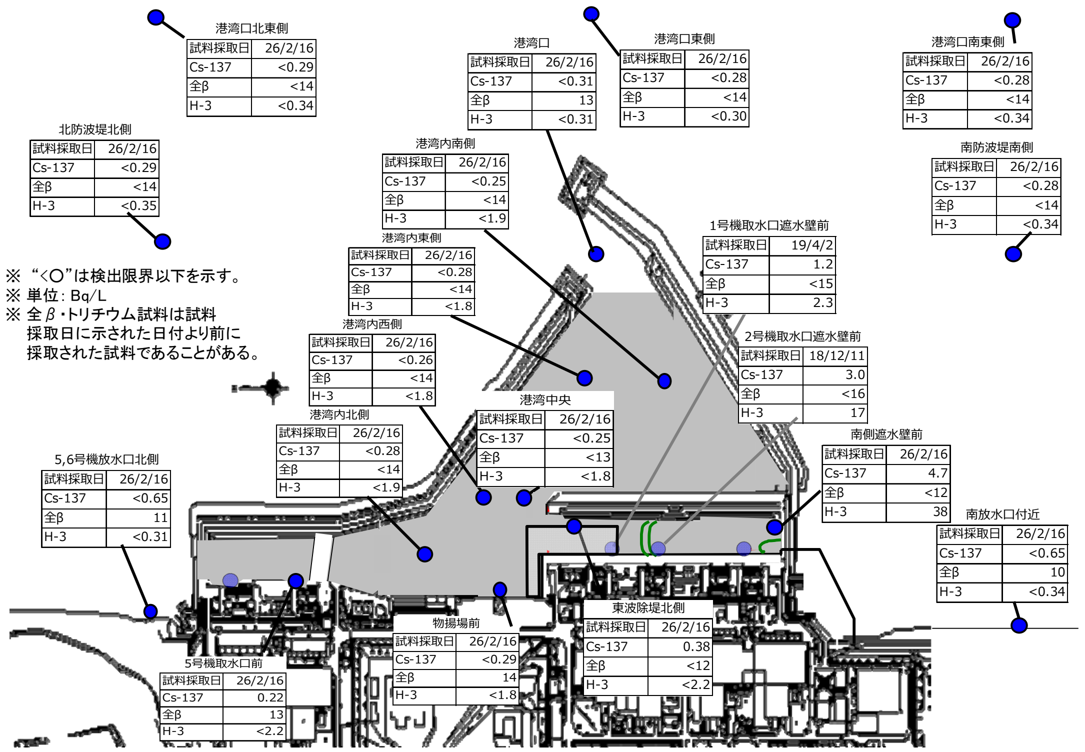


Figure 5: Seawater concentration around the port

Outlook of the number of staff required and efforts to improve the labor environment and conditions

Adequate number of staff will be secured in the long-term, while firmly implementing radiation control of workers. The work environment and labor conditions will be continuously improved by responding to the needs on the site.

- Staff management
  - The monthly average total of personnel registered for at least one day per month to work on site during the past quarter from October – December 2025 was approx. 9,100 (cooperating company workers and TEPCO HD employees), exceeding the monthly average workforce requirement (approx. 8,200). Accordingly, sufficient personnel were registered to work on site.
  - It was confirmed with the prime contractors that the estimated manpower necessary for the work in March 2026 (approx. 4,800 workers per day: cooperating company workers and TEPCO HD employees) would be secured at present. The average numbers of workers per day per month (actual values) for the most recent two years were maintained, at approx. 3,600 to 5,000.
  - The number of workers from within Fukushima Prefecture decreased, while those from outside the prefecture remained constant. As of January 2026, the local employment ratio (cooperating company workers and TEPCO HD employees) remained constant at around 70%.
  - The average exposure doses of workers were approx. 2.16, 2.18 and 2.08 mSv/person-year during FY2022, 2023 and 2024, respectively (the legal exposure dose limits are 100 and 50 mSv/person-year respectively over five years, the TEPCO HD management target is 20 mSv/person-year).
  - For most workers, the exposure dose remained sufficiently within the limit and allowed them to continue engaging in radiation work.

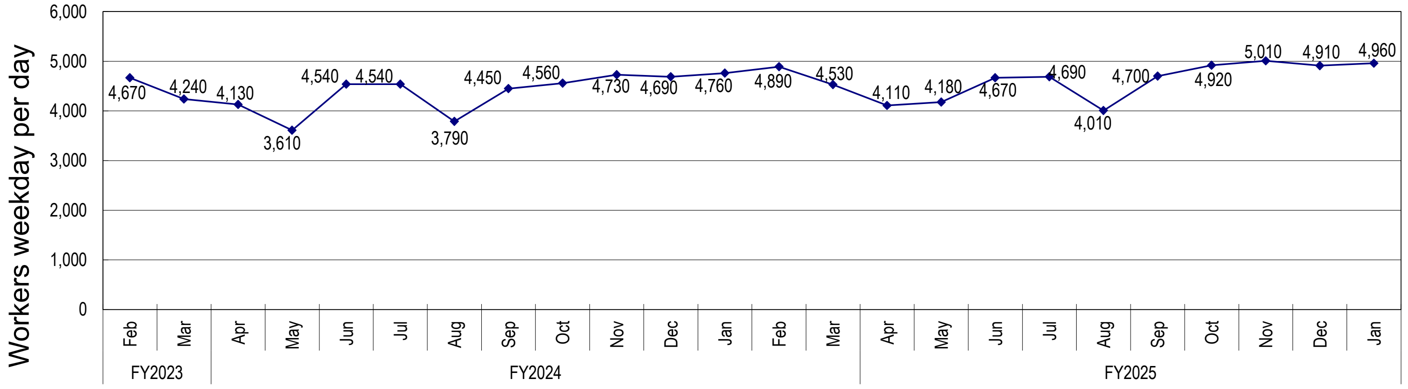


Figure 6: Changes in the average number of workers weekday per day for each month of the most recent 2 years (actual values)

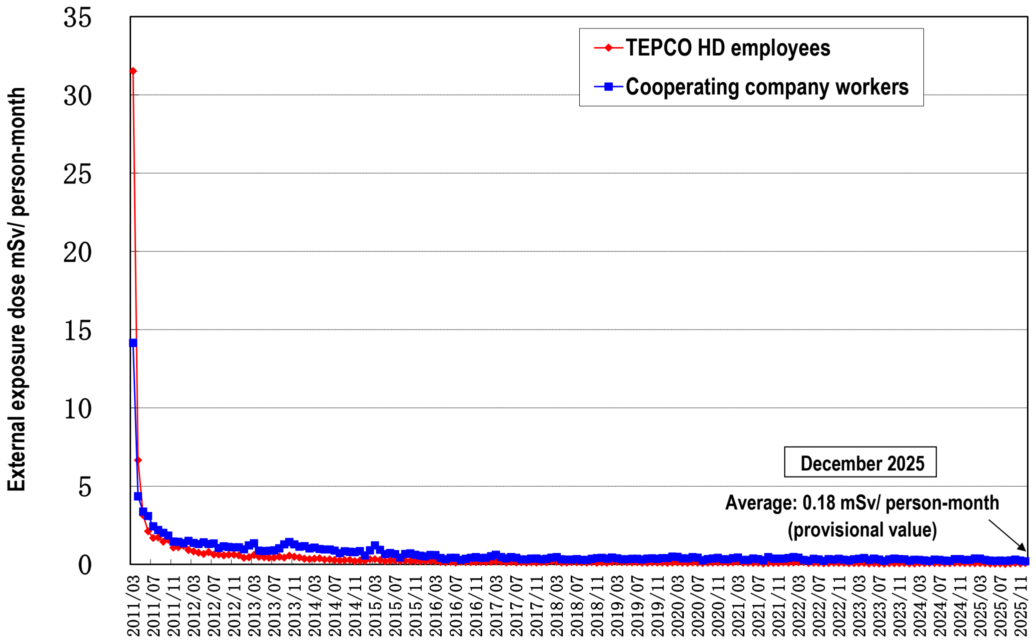


Figure 7: Changes in monthly average exposure dose of individual worker
(monthly exposure dose since March 2011)

➢ Countermeasures for infectious diseases

・ Countermeasures for various infectious diseases (influenza, norovirus, COVID-19, etc.) depend on personal decisions and basic preventive measures (visiting medical institutions when feeling unwell, ventilation, avoidance of the "Three Cs", frequent handwashing, etc.) being implemented appropriately by each worker. TEPCO continues decommissioning while prioritising safety.

Status of seawater monitoring within the port (comparison between the highest values in 2013 and the latest values)

"The highest value" → "the latest value (sampled during February 9 - 23)"; unit (Bq/L); ND represents a value below the detection limit

Summary of TEPCO data as of February 24, 2026

Note: The Total β measurement value is the total radioactivity concentration of radioactive materials that emit β-ray (Potassium-40, Cesium-137, Strontium-90, progeny nuclide Yttrium-90, etc.). In general, approx. 12 Bq/L of natural nuclide Potassium-40 is included in seawater.

Cesium-134	:	ND(0.34)
Cesium-137	:	ND(0.33)
Total β	:	ND(14)
Tritium	:	ND(1.9)

*1

Cesium-134	: 3.3	(H25/12/24)	→	ND(0.27)	Below 1/10
Cesium-137	: 7.3	(H25/10/11)	→	ND(0.28)	Below 1/20
Total β	: 69	(H25/8/19)	→	ND(14)	Below 1/4
Tritium	: 68	(H25/8/19)	→	ND(0.31)	Below 1/200

Cesium-134	: 3.3	(H25/10/17)	→	ND(0.30)	Below 1/10
Cesium-137	: 9	(H25/10/17)	→	ND(0.34)	Below 1/20
Total β	: 74	(H25/8/19)	→	ND(14)	Below 1/5
Tritium	: 67	(H25/8/19)	→	ND(1.7)	Below 1/30

Cesium-134	: 3.5	(H25/10/17)	→	ND(0.30)	Below 1/10
Cesium-137	: 7.8	(H25/10/17)	→	ND(0.33)	Below 1/20
Total β	: 79	(H25/8/19)	→	ND(14)	Below 1/5
Tritium	: 60	(H25/8/19)	→	ND(1.8)	Below 1/30

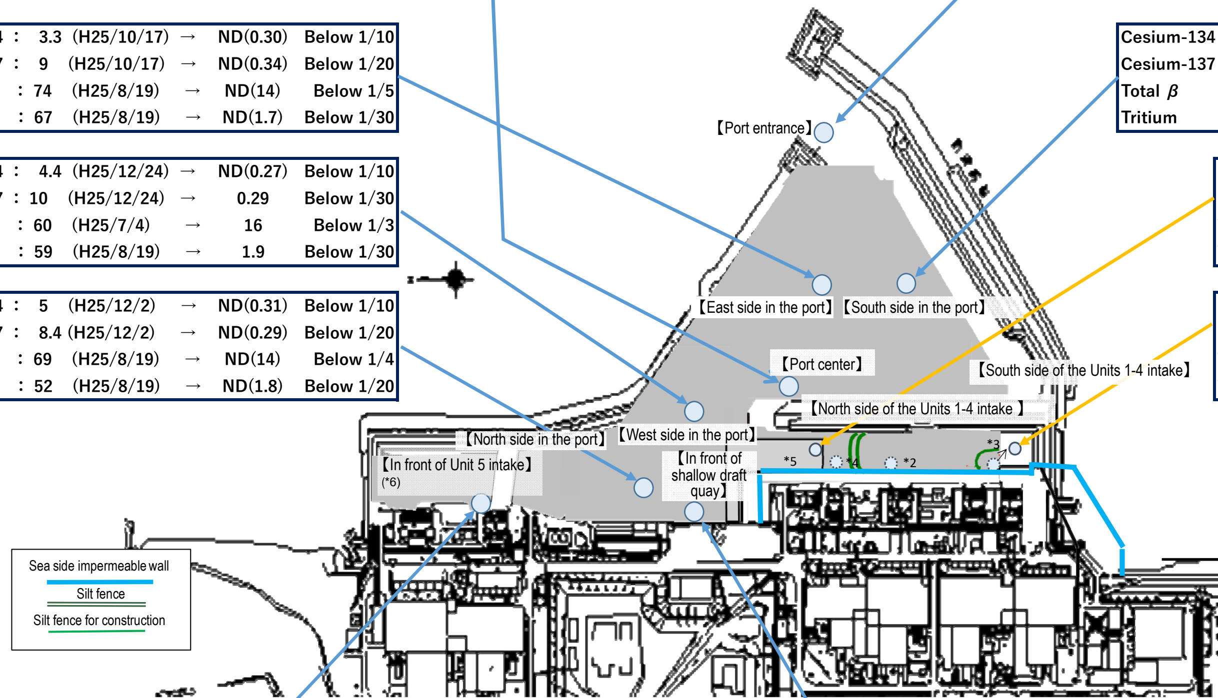
Cesium-134	: 4.4	(H25/12/24)	→	ND(0.27)	Below 1/10
Cesium-137	: 10	(H25/12/24)	→	0.29	Below 1/30
Total β	: 60	(H25/7/4)	→	16	Below 1/3
Tritium	: 59	(H25/8/19)	→	1.9	Below 1/30

Cesium-134	: 32	(H25/10/11)	→	ND(0.32)	Below 1/100
Cesium-137	: 73	(H25/10/11)	→	0.29	Below 1/200
Total β	: 320	(H25/8/12)	→	ND(13)	Below 1/20
Tritium	: 510	(H25/9/2)	→	ND(2.2)	Below 1/200

Cesium-134	: 5	(H25/12/2)	→	ND(0.31)	Below 1/10
Cesium-137	: 8.4	(H25/12/2)	→	ND(0.29)	Below 1/20
Total β	: 69	(H25/8/19)	→	ND(14)	Below 1/4
Tritium	: 52	(H25/8/19)	→	ND(1.8)	Below 1/20

Cesium-134	:	ND(0.37)
Cesium-137	:	6.4
Total β	:	ND(13)
Tritium	:	36

*1



Cesium-134	: 2.8	(H25/12/2)	→	ND(0.32)	Below 1/8
Cesium-137	: 5.8	(H25/12/2)	→	ND(0.31)	Below 1/10
Total β	: 46	(H25/8/19)	→	ND(13)	Below 1/3
Tritium	: 24	(H25/8/19)	→	ND(2.1)	Below 1/10

Cesium-134	: 5.3	(H25/8/5)	→	ND(0.33)	Below 1/10
Cesium-137	: 8.6	(H25/8/5)	→	ND(0.30)	Below 1/20
Total β	: 40	(H25/7/3)	→	ND(13)	Below 1/3
Tritium	: 340	(H25/6/26)	–	ND(1.9)	Below 1/100

*1: Monitoring commenced in or after March 2014. Monitoring inside the sea-side impermeable walls was finished because of the landfill.

*2: For the point, monitoring was finished from December 12, 2018 due to preparatory work for transfer of mega float.

*3: For the point, monitoring point was moved from February 6, 2019 due to preparatory work for transfer of mega float. The point was further moved to the outside of the silt fence from January 20, 2023, to install the silt fence to the Drainage Channel K outlet as a measure for fish in the port. (The sampling point was moved to approx.. 3m east side)

*4: For the point, monitoring was finished from April 3, 2019 due to preparatory work for transfer of mega float.

*5: For the point, monitoring point was moved to the land side from May 25, 2023 along with work in the surrounding area.

*6: For the point, with the completion of work to install ALPS related facilities and others, monitoring point was moved from "In front of Unit 6 intake" to "In front of Unit 5 intake" from July 3, 2023.

	Legal discharge limit	WHO Guidelines for Drinking Water Quality
Cesium-134	60	10
Cesium-137	90	10
Strontium-90	30	10
Tritium	60,000	10,000

Source: TEPCO website Analysis results on nuclides of radioactive materials around Fukushima Daiichi Nuclear Power Station http://www.tepco.co.jp/decommision/planaction/monitoring/index-j.html

Status of seawater monitoring around outside of the port
(comparison between the highest values in 2013 and the latest values)

Unit (Bq/L); ND represents a value below the detection limit; values in ( ) represent the detection limit; ND (2013) represents ND throughout 2013

(The latest values sampled during January 5 - February 23 26)

Summary of TEPCO data as of February 24, 2026

	Legal discharge limit	WHO Guidelines for Drinking Water Quality
Cesium-134	60	10
Cesium-137	90	10
Strontium-90	30	10
Tritium	60,000	10,000

【Northeast side of port entrance (offshore 1 km)】

Cesium-134 :	ND	(H25)	→	ND(0.33)
Cesium-137 :	ND	(H25)	→	ND(0.23)
Total β :	ND	(H25)	→	ND(13)
Tritium :	ND	(H25)	→	ND(0.34)

【East side of port entrance (offshore 1 km)】

Cesium-134 :	ND	(H25)	→	ND(0.30)	
Cesium-137 :	1.6	(H25/10/18)	→	ND(0.23)	Below 1/2
Total β :	ND	(H25)	→	ND(13)	
Tritium :	6.4	(H25/10/18)	→	ND(0.30)	Below 1/20

【Southeast side of port entrance (offshore 1 km)】

Cesium-134 :	ND	(H25)	→	ND(0.30)
Cesium-137 :	ND	(H25)	→	ND(0.27)
Total β :	ND	(H25)	→	13
Tritium :	ND	(H25)	→	ND(0.34)

【North side of north breakwater (offshore 0.5 km)】

Cesium-134 :	ND	(H25)	→	ND(0.29)	
Cesium-137 :	ND	(H25)	→	ND(0.27)	
Total β :	ND	(H25)	→	17	
Tritium :	4.7	(H25/8/18)	→	ND(0.34)	Below 1/20

【Port entrance】

Cesium-134 :	3.3	(H25/12/24)	→	ND(0.27)	Below 1/10
Cesium-137 :	7.3	(H25/10/11)	→	ND(0.28)	Below 1/20
Total β :	69	(H25/8/19)	→	ND(14)	Below 1/4
Tritium :	68	(H25/8/19)	→	ND(0.31)	Below 1/200

【South side of south breakwater (offshore 0.5 km)】

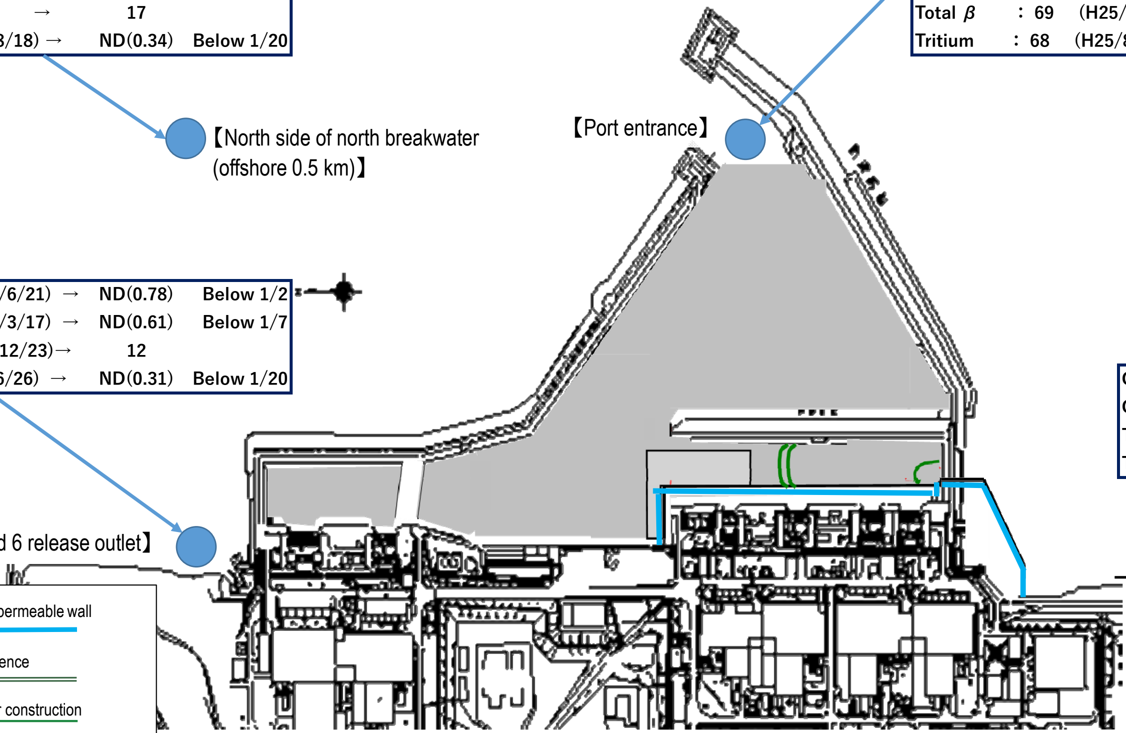
Cesium-134 :	ND	(H25)	→	ND(0.31)
Cesium-137 :	ND	(H25)	→	ND(0.28)
Total β :	ND	(H25)	→	ND(13)
Tritium :	ND	(H25)	→	ND(0.34)

【North side of Unit 5 and 6 release outlet】

Cesium-134 :	1.8	(H25/6/21)	→	ND(0.78)	Below 1/2
Cesium-137 :	4.5	(H25/3/17)	→	ND(0.61)	Below 1/7
Total β :	12	(H25/12/23)	→	12	
Tritium :	8.6	(H25/6/26)	→	ND(0.31)	Below 1/20

【Near south release outlet (*)】

Cesium-134 :	ND	(H25)	→	ND(0.75)	
Cesium-137 :	3	(H25/7/15)	→	ND(0.61)	Below 1/4
Total β :	15	(H25/12/23)	→	8.6	
Tritium :	1.9	(H25/11/25)	→	ND(0.34)	Below 1/2



Sea side impermeable wall

Silt fence

Silt fence for construction

* Due to erosion, the sampling point was moved from approx. 320m south to approx. 1,300m south from the south release outlet in December 2021. In September 2023, since erosion was eliminated, the sampling point was returned to the original point, approx. 320m south from the south release outlet. Moreover, due to erosion, the sampling point has been moved again to approx. 1,300m south from the south release outlet since June 11, 2024.

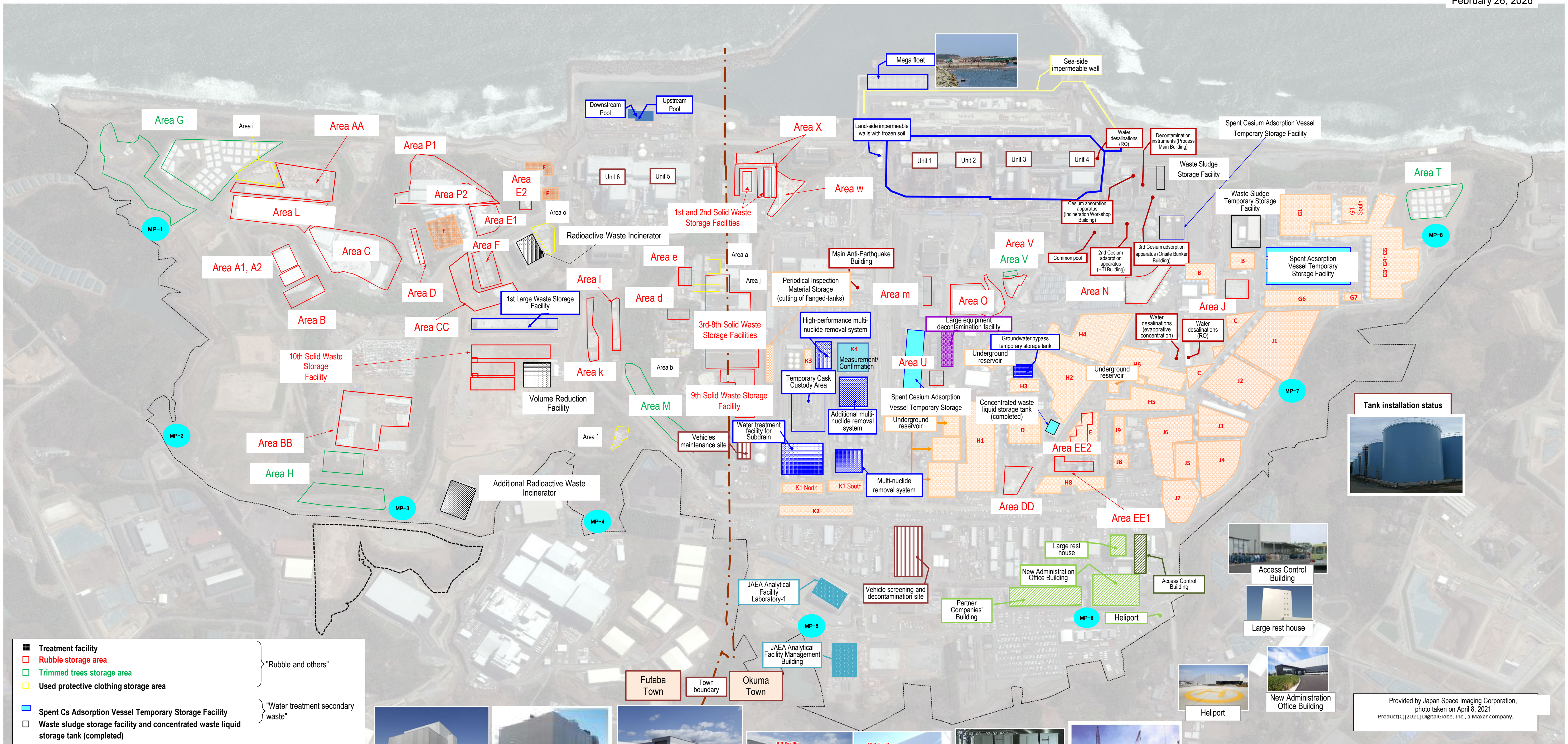
Note: The Total β measurement value is the total radioactivity concentration of radioactive materials that emit β-ray (Potassium-40, Cesium-137, Strontium-90, progeny nuclide Yttrium-90, etc.). In general, approx. 12 Bq/L of natural nuclide Potassium-40 is included in seawater.

Source: TEPCO website, Analysis results on nuclides of radioactive materials around Fukushima Daiichi Nuclear Power Station

http://www.tepco.co.jp/decommision/planaction/monitoring/index-j.html

Appendix 2
February 26, 2026

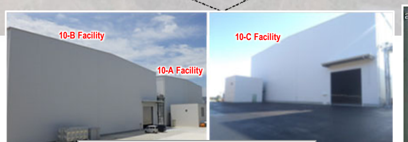
TEPCO Holdings Fukushima Daiichi Nuclear Power Station Site Layout




1st Large Waste Storage Facility


Radioactive Waste Incinerator


Volume Reduction Facility



10th Solid Waste Storage Facility


Solid Waste Storage Facility


Waste Sludge Temporary Storage Facility


Spent Adsorption Vessel Temporary Storage Facility

Storage status of rubble and water treatment secondary waste is quoted from "Fukushima Daiichi Nuclear Power Station Solid Waste Storage Management Plan ~FY2024 Revision~" published in December 2024

1 Contaminated water management

- Efforts to promote contaminated water management based on three basic policies:
  ① "Removing" the contamination source ② "Redirecting" groundwater from the contamination source
  ③ "Preventing leakage" of contaminated water

Milestones of the Mid- and-Long-Term Roadmap (major target processes)
・[Completed] Suppressing the amount of contaminated water generated to 150 m³/day or less (within 2020)
・[Completed] Suppressing the amount of contaminated water generated to 100 m³/day or less (within 2025)
・[Completed] Treatment of stagnant water in buildings was completed* (within 2020) *Except for Units 1-3 Reactor Buildings, Process Main Building and High Temperature Incinerator Building.
・[Completed] Stagnant water in Reactor Buildings was reduced to about a half of the level at the end of 2020 (FY2022-FY2024)

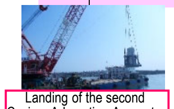
2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026

Contaminated water management 【Remove】

Contaminated water treatment facility

▽Reception start of contaminated water to Central Waste Treatment Building
▽Decontamination equipment (AREVA)
▽Evaporative concentration equipment
▽Cesium Adsorption Apparatus (KURION)
▽2nd Cesium Adsorption Apparatus (SARRY)
▽Treatment of RO-condensed salt water complete
▽Reduction of strontium by Cesium Adsorption Apparatus (KURION) (from 2015.1.6)
▽Reduction of strontium by 2nd Cesium Adsorption Apparatus (SARRY) (from 2014.12.26)
▽Purification of strontium-reduced water in flanged tanks complete
▽Purification of strontium-reduced water complete
▽Reduction of strontium by 3rd Cesium Adsorption Apparatus (SARRY II) (from 2019.7.12)
▽Treatment start of strontium-reduced water (ALPS: from 2015.12.4, additional: from 2015.5.27, high-performance: from 2015.4.15)
▽Multi-nuclide Removal System (ALPS) (System A: from 2013.3.30, System B: from 2013.6.13, System C: from 2013.9.27, hot tests conducted)
▽Multi-nuclide Removal System (additional ALPS)
▽Start of full-scale operation (from 2017.10.16)
▽Multi-nuclide Removal System (high performance ALPS) (from 2014.10.18, hot tests conducted)
▽Inspection prior to use granted (2023.3.2)


Cesium Adsorption Apparatus (KURION)


Landing of the second Cesium Adsorption Apparatus (SARRY)


Multi-nuclide removal system (ALPS)

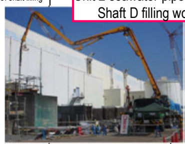
Removal of contaminated water from seawater pipe trench

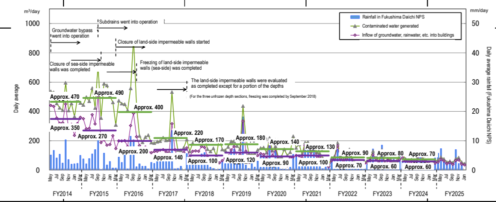
【Removal of contaminated water in seawater pipe trench】

Unit 2
▽Trench Purification by mobile equipment
▽Completion of tunnel filling
▽Transfer of stagnant water complete
▽Completion of shaft filling

Unit 3
▽Completion of tunnel filling
▽Transfer of stagnant water complete
▽Completion of shaft filling (except for upper part of Shaft D)

Unit 4
▽Completion of tunnel filling
▽Filling of openings II and III complete
▽Transfer stagnant water complete
▽Completion of filling parts running over drainage channel


Unit 2 seawater pipe trench Shaft D filling work



Contaminated water management 【Redirect】

Groundwater bypass

▽Installation start of groundwater bypass
▽Operation start of groundwater bypass (drainage started from 2014.5.21)
Suppressing the average amount of contaminated water generated to approx. 80 m3/day▽


Pumping well

Subdrain

▽Recovery of existing subdrain pit and start of new installation
▽Installation start of Water-Treatment Facility special for Subdrain & Groundwater drains
▽Operation start of subdrain (drainage started from 2015.9.14) (Treatment capacity: 1000 m³/day)
▽Enhancement of treatment capacity (2000m³/day)


Subdrain purification system

Land-side impermeable wall

▽Installation start of land-side impermeable walls
▽Freezing start
Start of maintenance oeperation on east side▽
▽Start of maintenance operation on north and south sides
▽Freezing completion (except for some parts)
▽Freezing completion
▽Start of maintenance operation in all sections
In some temperature measurement tubes near the K drainage channel cross, temperature exceeded 0℃ locally▽
Although no influence was detected on the impermeable function of the land-side impermeable walls but test investigation is underway for the stoppage effect


Land-side impermeable wall brine (refrigerant) circulation pipe

Facing

▽Completion of waterproof pavement (facing) (except for areas of 2.5 and 6.5m above sea level and around Units 1-4)
▽Completion of waterproof pavement (facing) (except for around Units 1-4)

Contaminated water management 【Retain】

Bank groundwater measures

High concentration of radioactive materials detected from observation well of bank ▽
▽Area 2.5m above sea level – Start of ground improvement by water glass
▽Completion
▽Start of pumping of water from contaminated areas (well point)
▽Installation start of seaside impermeable walls
▽Installation of seaside impermeable walls complete
▽Operation start of groundwater drain (pumping-up started on 2015.11.5)


Placement of seaside impermeable walls complete

Storage facility

▽Completion of purification treatment of RO concentrated salt water
▽Storage in steel square tanks
▽Completion of replacement of steel square tanks
▽Removal of steel horizontal tanks complete (except for condensed waste liquid storage tank)
▽Commencement of decontamination/dismantling of unused horizontal tanks
▽Water leakage (300L) from flanged tank
▽Water leakage (100t) from flanged tank
▽Storage in flanged cylindrical tanks
▽Completion of fence to prevent leakage expanding
▽Water leakage (10L) from flanged tank
▽Work to raise fence height complete
▽Purification of strontium-reduced water in flanged tanks complete
▽Transfer and storage of all treated water in welded-joint tanks
▽Leakage of contaminated water from underground reservoir => Start of transfer to tanks
▽Transfer of contaminated water to tanks complete
▽Storage in cylindrical steel welded-joint tanks
▽Purification of strontium-reduced water complete
Commencement of dismantling of J9 area tanks▽
Commencement of dismantling of J8 area tanks▽
Completion of dismantling of J9 area tanks▽
▽Sprinkling start of rainwater within tank fences by rainwater treatment facility (from 2014.5.21)


Construction of welded-joint tanks


Flanged and welded-joint tanks

Treatment of stagnant water

▽Installation of stagnant water transfer equipment/transfer start
▽Completion of work to improve reliability of transfer line (replacement with PE pipes)
▽Start to maintain water-level difference with subdrain water level
▽Transfer start from each building to Central Rw Building
▽Treatment of stagnant water in buildings complete
▽ Reduction of stagnant water in the Reactor Buildings to approx. half of the level at the end of 2020 achieved
▽Floor exposure of Unit 1 T/B
▽Separation of stagnant water between Units 1 and 2
▽Floor exposure of Unit 1 Rw/B
▽Separation of stagnant water between Units 3 and 4
▽Floor exposure of Unit 2 T/B, Rw/B
▽Floor exposure of Unit 3 T/B, Rw/B
▽Floor exposure of Unit 4 R/B, T/B, Rw/B
▽Completed lowering to target water level of Unit 2 R/B
▽Completed lowering to target water level of Units 1, 3 R/B

Countermeasures to tsunami risks

Closure of openings

▽Examination start of measures to close building openings
▽Work for common pool complete
▽Work for Units 1 and 2 T/B complete
▽Work for HTI building complete
▽Work for Process Main Building complete
▽Work for Unit 3 T/B complete
▽Work for Units 1-3 R/B complete
▽Measures to close openings were completed
▽Work for Units 1-4 RwB was completed

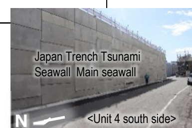
Seawall

▽Installation of outer-rise tsunami seawall complete
▽Construction start of Chishima Trench Tsunami Seawall
▽Completion of installatioı
Japan Trench tsunami seawall ▽On-site start
Japan Trench Tsunami Seawall Completion of main wall constructio▽

Mega float

▽Start of marine construction
Temporary grounding of mega float▽
▽Internal filling complete (reduction of tsunami risks)


Chishima Trench Tsunami Seawall complete



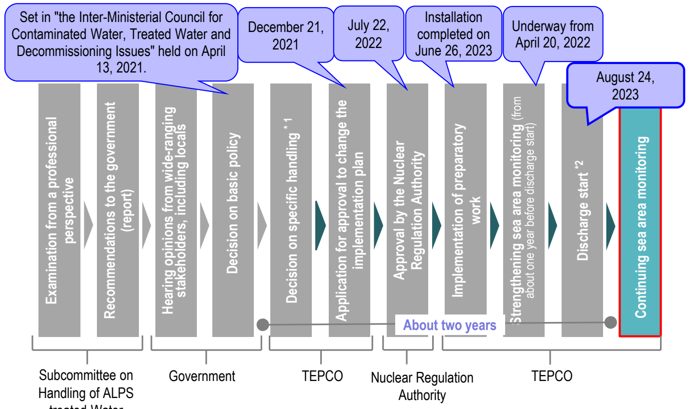
Japan Trench Tsunami Seawall

2 Handling of ALPS treated water

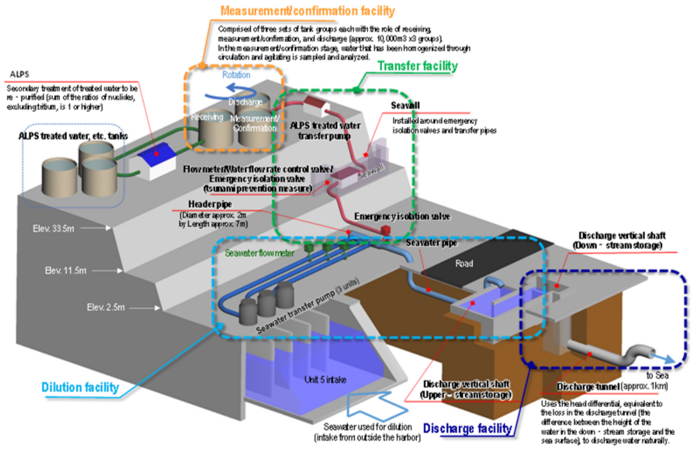
February 26, 2025
Secretariat of the Team for Countermeasures for Decommissioning, Contaminated Water and Treated Water

In “the Inter-Ministerial Council for Contaminated Water, Treated Water and Decommissioning Issues” held on April 13, 2021, the basic policy on how to handle ALPS treated water was set. Based on this, the response of TEPCO was announced on April 16.

Regarding the discharge of ALPS treated water into the sea, TEPCO must comply with regulatory and other safety-related standards to ensure the safety of the public, surrounding environment and agricultural, forestry and fishery products. To minimize adverse impacts on reputation, monitoring will be further enhanced, objectivity and transparency ensured by engaging with third-party experts and safety checked by the IAEA. Moreover, accurate information will be disseminated continuously and in a highly transparent manner.



*1 Including radiation impact assessment on human beings and the environment
*2 Discharges into the sea will be conducted gradually during the initial phase



● Rearing test of marine organisms

All planned marine organisms rearing tests have been completed. The results confirmed by the rearing tests were as follows:

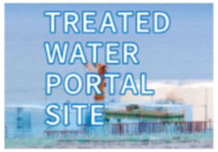
・Marine organisms rearing tests were conducted both in “normal seawater” and in “ALPS treated water diluted with seawater”. The marine organisms in these two environments were compared via rearing data to confirm the absence of any significant differences between the two populations.

・TEPCO confirmed that “tritium is not concentrated in the living bodies and that the concentration of tritium in living bodies does not exceed that of the rearing environment” as demonstrated in previous knowledge.

・Flounders and abalones that were being raised in normal seawater were put in “water discharged into the environment” and TEPCO confirmed that there was no remarkable change in the growth of the flounders or abalones around this time. Flounder and abalone were reared in water discharged into the environment for approximately six months and we confirmed that there is no change in the growth of them.

Information provision and communication to foster understanding

■ Occasions to deepen the understanding are organized by communications related to decommission via various media and visit to the power station.



■ On the dedicated website “Treated Water Portal Site” (Japanese, English, Chinese and Korean) within the TEPCO website, monitoring results of radioactive materials are published timely.

Dialogue meeting

■ Visit and dialogue meeting of Fukushima Daiichi Nuclear Power Station have been held since FY2019 for 13 cities, towns and villages in the Hamadori region. From FY2021 onward, these activities have been expanded to include the entire Fukushima Prefecture.

■ Through various opportunities such as visit and on-site explanations, communications continue where opinions of related parties are heard, their thoughts are taken seriously, and TEPCO conveys its efforts, thoughts, and countermeasures for reputational damage.

● **Status of discharge of ALPS treated water into the sea**

Discharge of ALPS treated water into the sea commenced from August 24, 2023, and the 1st discharge was completed on September 11.

During the discharge period, no abnormality was detected by the sea area monitoring conducted by the national government, Fukushima Prefecture and TEPCO.

<Discharges in FY2025>

Tank group discharged	Tank Group A	Tank Group C	Tank Group A	Tank Group B
Tritium concentration	370,000 Bq/L	250,000 Bq/L	380,000 Bq/L	210,000 Bq/L
Discharge commencement	April 10, 2025	July 14, 2025	August 7, 2025	September 11, 2025
Discharge termination	April 28, 2025	August 3, 2025	August 25, 2025	September 29, 2025
Discharge amount	7,853 m^3	7,873 m^3	7,908 m^3	7,872 m^3
Total tritium amount	Approx. 2.9 trillion Bq	Approx. 2.0 trillion Bq	Approx. 3.0 trillion Bq	Approx. 1.7 trillion Bq

Tank group discharged	Tank Group C	Tank Group A
Tritium concentration	250,000 Bq/L	310,000 Bq/L
Discharge commencement	October 30, 2025	December 4, 2025
Discharge termination	November 17, 2025	December 22, 2025
Discharge amount	7,838 m^3	7,833 m^3
Total tritium amount	Approx. 2.0 trillion Bq	Approx. 2.4 trillion Bq

● **Publication of the Comprehensive Report of the IAEA safety review**

The Comprehensive Report on the safety review concerning handling of ALPS treated water was published by the IAEA on July 4, 2023.

In the Executive Summary of the IAEA Comprehensive Report, the IAEA concluded the following: (1) the activities by Japan associated with the discharge of ALPS treated water into the sea are consistent with relevant international safety standards, (2) the discharge of the ALPS treated water will have a negligible radiological impact on people and the environment.

We will continue to share necessary information with the IAEA, while striving to foster further understanding of the international community about the discharge of ALPS treated water into the sea.

https://www.iaea.org/topics/response/fukushima-daiichi-alps-treated-water-discharge-comprehensive-reports

Examination concerning handling of ALPS treated water

Tritiated Water Taskforce (2013.12 – 2016.5, 15 meetings)

2016.6 Report of Tritiated Water Taskforce

Tank area viewed from the Large Rest House (2015.10.29)

Subcommittee on Handling of ALPS treated water (2016.11 – 2020.1, 17 meetings)

2018.8 Explanatory and hearing meeting, receiving opinions

2020.2 Report of Subcommittee on Handling of ALPS treated water

Opportunity for receiving opinions from parties concerned concerning handling of ALPS treated water (2020.4 – 2020.10, 7 meetings)

2021.4.13 The basic policy on the handling of ALPS treated water was set
2021.4.16 The response of TEPCO was announced

2021.12.21 The “Application Documents for Approval to Amend the Implementation Plan for Fukushima Daiichi Nuclear Power Station Specified Nuclear Facility” regarding ALPS treated water were submitted to the Nuclear Regulation Authority
2021.12.28 “The Action Plan concerning the Continuous Implementation of the Basic Policy on Handling of ALPS Treated Water” was formulated

Review meeting concerning the implementation plan on handling of ALPS treated water (2021.7 - 2022.4, 15 meetings)

2022.4.28, 5.13, 7.15 Application to partially revise the Application Documents for Approval to Amend the Implementation Plan was submitted

2022.7.22 Application for the Application Documents for Approval to Amend the Implementation Plan was approved

2022.8.4 Work has commenced

2022/8/30 The "Approach to Strengthening and Expansion of Measures in the Handling of ALPS Treated Water" was summarized

2022.11.14 Application for the Application Documents for Approval to Amend the Implementation Plan was submitted (amendment of organizational structure, and nuclides to be measured and assessed, and others)

2023.2.14, 20 Application for the Application Documents for Approval to Amend the Implementation Plan was submitted (amendment of organizational structure, and nuclides to be measured and assessed, and others)

2023.5.10 Approval

2023.6.26 Completion of installation

2023.7.7 Receipt of Certificate of Completion for Inspection Prior to Use

2023.8.24 Commencement of discharge

2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

3 Removal of fuel from spent pool

Milestones of the Mid- and-Long-Term Roadmap (major target processes)
・Completion of Units 1-6 fuel removal (within 2031)
・Completion of installation of Unit 1 large cover (around FY2023), start of Unit 1 fuel removal (FY2027-2028)
・Start of Unit 2 fuel removal (FY2024-2026)

February 26, 2025
Secretariat of the Team for Countermeasures for Decommissioning, Contaminated Water and Treated Water

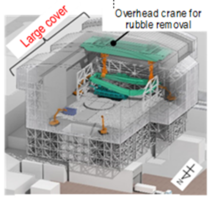
Legend: Rubble removal, etc. → Installing a fuel removal machine → Fuel removal → Storage and handling of fuel

2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026～

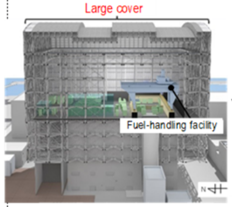
Unit 1

For Unit 1, a large cover will be installed over the whole building, within which rubble will be removed.

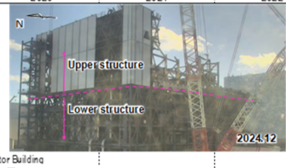
<Reference> Progress to date
Rubble removal on the north side of the operating floor started from January 2018 and has been implemented sequentially. In July and August 2019, the well plug, which was misaligned, was investigated, followed in August and September by the conditions of the overhead crane. Based on the results of these investigations, as the removal requires more careful work taking dust scattering into consideration, two methods were examined: Installing a cover after rubble removal, initially installing a large cover over the Reactor Building, then removing rubble inside the cover.



Rubble removal (image)



Fuel removal (image)



In order to install a large cover at the Unit 1 Reactor Building, high-dose locations were detected on the south exterior wall, and as a measure to reduce radiation exposure, shielding was installed over the high-dose locations.
The target to complete the installation of the Unit 1 large cover had been around the summer of FY2025, based on the impact of hot spots detected on the south side (announced in December 2023).
The process needs to be extended, because as the lower structure was installed and the detailed dose impact can be confirmed from the operating floor, radiation exposure reduction measures need to be implemented to ensure safer work. In addition, days when work was forced to be suspended due to bad weather increased, and trouble occurred with the craned used for the work.
Based on the possibility of future process extension for similar reasons, and the necessity to assume shortened work time due to intense heat and others, expected completion of installation of a large cover was changed from around the summer in FY2025 to within FY2025.
The last block of the retractable roof was installed on January 13, 2026, and a function check of the retractable roof was performed on January 19, thereby marking the completion of large cover installation. Among the milestones of the Mid-and-Long-term Roadmap, the start of fuel removal from the Unit 1 spent fuel pool, which is set from FY2027 to FY2028, is not reviewed at present, because future process can be shortened by reviewing the work procedures and others in work after rubble removal.

▼2017.12 Completion of building cover dismantling and windbreak fence installation
▼2018.1-2020.12 Rubble removal on the north side of Reactor Building
▼2018.9-12 Removal of X-braces
▼2020.3-6 Installation of spent fuel pool cover
▼2020.9-11 Measures to prevent and alleviate rubble falling
▼2020.11-2021.6 Dismantling of remaining cover
▼2021.8 Start of large cover pre-work
▼2022.4 Start of large cover installation work
▼2026.1 Completion of large cover installation

Unit 2

For Unit 2, with the removal of spent fuel in mind, a "gantry for fuel removal" (gantry and front room) will be constructed on the south side of the building.

<Reference> Progress to date
Previously, scope to recover the existing overhead crane and the fuel-handling machine was examined. However, the high radiation dose inside the operating floor meant the decision was taken to dismantle the upper part of the building in November 2015. Findings from internal investigations of the operating floor from November 2018 to February 2019 underlined the potential to conduct limited work there and the means of accessing from the south side was examined.

Installation of the runway girder (2024.3.19)

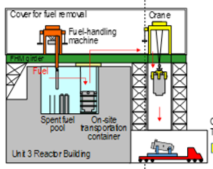
As part of efforts to remove fuel from the Unit 2 spent fuel pool and based on findings from internal operating floor investigations from November 2018 to February 2019, instead of fully dismantling the upper part of the building, the decision was made to install a small opening on the south side and use a boom crane. Examination continues to initiate fuel removal from FY2024 to FY2026.

▼2015.3-2016.11 Yard construction
▼2016.9-2017.4 West-side gantry installation work
▼2017.5 Opening a hole in the west-side external wall
▼2018.8-2020.12 Moving and containment of remaining objects
▼2020.6 Investigation inside the spent fuel pool
▼2021.6-2022.1 Decontamination of R/B operating floor (1)
▼2021.9-2022.5 Shielding installation in R/B operating floor (1)
▼2022.5-2022.6 Transfer of FHM
▼2022.7-2023.1 Removal and clean-up of FHM operation room
▼2022.12-2023.3 Removal of existing facilities in operating floor
▼2023.4-2023.11 Decontamination of R/B operating floor (2)
▼2023.11- Shielding of R/B operating floor (2)
▼2024.4 Start of preparation for installing an opening
▼2024.6 Completion of installation of gantry for fuel removal
▼2024.9 Start of trial operation of ventilation equipment
▼2024.10 Start of installation of runway girder
▼2025.3 Completion of installation of runway girder
▼2025.5 Completion of hanging of fuel-handling machine
▼2021.10-2022.4 Ground improvement work
▼2023.1 Start of steel erection
▼2023.2 Start of south-side existing facilities dismantling

Unit 3

All fuel assemblies from Unit 3 had been removed by February 2021.

Overview of the fuel-handling facility inside the cover



Before installing a cover for fuel removal, the process of removing large rubble from the spent fuel pool was completed in November 2015. To ensure safe and steady fuel removal, training via remote control was conducted at the factory using the actual fuel-handling machine to be installed on site (February – December 2015). Installation of the fuel removal cover was completed on February 23, 2018.
With fuel removal in mind, rubble retrieval training inside the pool, which was scheduled in conjunction with fuel removal training, started from March 15, 2019 and fuel removal started from April 15, 2019. Fuel removal was completed on February 28, 2021.

<Unit 3 Cover for fuel removal (dome roof) 2019.2.21>

▼2013.10 Completion of removal of large rubble on the Reactor Building top floor
▼2015.8 Completion of removal of the fuel-handling machine B within the spent fuel pool
▼2016.12 Completion of shielding on the Reactor Building top floor
▼2017.1 Installation start of a cover for fuel removal
▼2019.4.15 Start of fuel removal
▼2021.2.28 Fuel removal completed (566 assemblies)

Unit 4

All fuel assemblies from Unit 4 had been removed by December 2014.


<Unit 4 Cover for fuel removal>


Fuel removal

In the Mid- and-Long-Term Roadmap, the Phase 1 target involved starting to remove fuel from inside the spent fuel pool (SFP) of the 1st Unit within two years of completing Step 2 (by December 2013).
On November 18, 2013, fuel removal from Unit 4, namely the first Unit, got underway and Phase 2 of the roadmap started.
On November 5, 2014, within a year of commencing fuel removal work, all 1,331 spent fuel assemblies in the pool had been transferred. The transfer of the remaining non-irradiated fuel assemblies to the Unit 6 SFP was completed on December 22, 2014. (two of the non-irradiated fuel assemblies were removed in advance in July 2012 for fuel checks)
This marks the completion of fuel removal from the Unit 4 Reactor Building.

▼2011.11- 2012.7 Removal of rubble on the Reactor Building top floor
▼2012.4-2013.3 Ground improvement and foundation work
▼2013.4-2013.7 Installation of external walls and roof panels
▼2013.6-2013.10 Installation of overhead crane and fuel-handling machine
▼2013.8-2013.10 Removal of rubble inside the reactor well and pool
▼2013.11.18 Start of fuel removal
▼2014.12.22 Fuel removal was completed (1533 assemblies)

* Part of the photo is corrected because it includes machine information related to nuclear material protection.

4 Work toward fuel debris retrieval

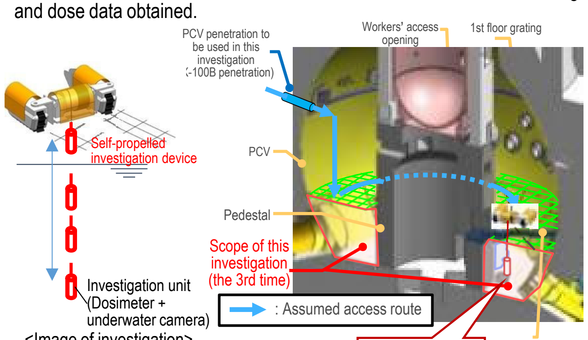
Milestones of the Mid- and-Long-Term Roadmap (major target processes)
Commencement of fuel debris retrieval from the first unit (Unit 2). Expanding the scale in stages (From September 10, 2024, trial fuel debris retrieval commenced)

Before removing fuel debris, investigations inside the Primary Containment Vessel (PCV) are conducted to inspect the conditions there, including locations of fuel debris.

Unit 1 Investigation overview

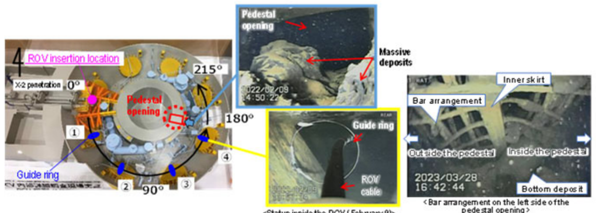
・In April 2015, a device having entered the inside of the PCV via a narrow opening (bore:φ100 mm) collected information such as images and airborne dose inside the PCV 1st floor.

・In March 2017, an investigation using a self-propelled investigation device was conducted to inspect the spreading of debris to the basement floor outside the pedestal, with images taken of the PCV bottom status for the first time. The conditions inside the PCV will continue to be examined, based on the imagery and dose data obtained.



<Image of investigation>

・In February 2022, "the guide ring" was installed to facilitate the investigation. From March 28, 2023, the investigation inside the pedestal by ROV-A2 started and confirmed that a portion of the bar arrangement was exposed. Regarding the soundness of the pedestal, based on the past earthquake resistant evaluation by the International Research Institute for Nuclear Decommissioning (IRID), it was evaluated that even though a portion of the pedestal was lost, there would be no serious risk. However, as the present information is very limited, the investigation will continue to acquire as much information as possible for continued evaluation.



<Status inside the PCV (February 9)> <Bar arrangement on the left side of the pedestal opening>

Unit 1 PCV internal investigation

Investigations inside the PCV	1st (2012.10)	- Acquiring images - Measuring the air temperature and dose rate - Measuring the water level and temperature - Sampling stagnant water - Installing permanent monitoring instrumentation
	2nd (2015.4)	Confirming the status of the PCV 1st floor - Acquiring images - Measuring the air temperature and dose rate - Replacing permanent monitoring instrumentation
	3rd (2017.3)	Confirming the status of the PCV 1st basement floor - Acquiring images - Measuring the dose rate - Sampling deposit - Replacing permanent monitoring instrumentation
	4th (From 2022.2)	Acquiring information inside PCV (inside/outside of the pedestal) - Acquiring images - Measuring deposit thickness and sampling deposit - Detecting deposit debris, 3D mapping
Leakage points from PCV		- PCV vent pipe vacuum break line bellows (identified in 2014.5) - Sand cushion drain line (identified in 2013.11)
Evaluation of the location of fuel debris inside the reactor by measurement using muons Confirmed that there was no large fuel in the reactor core. (2015.2-5)		

Unit 2 Investigation overview

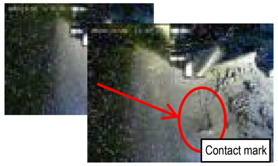
・In January 2017, a camera was inserted from the PCV penetration to inspect the conditions of the rail on which the robot traveled. The results of a series of investigations confirmed some gratings had fallen and deformed as well as a quantity of deposit inside the pedestal.

・In January 2018, the conditions below the platform inside the pedestal were investigated. Based on the analytical results of images obtained in the investigation, deposits, probably including fuel debris, were found at the bottom of the pedestal. Moreover, multiple parts exceeding the surrounding deposits were also detected. We presumed that there were multiple instances of fuel debris falling.

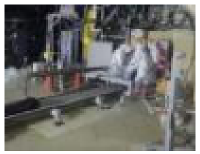
・In February 2019, an investigation touching the deposits at the bottom of the pedestal and on the platform was conducted and confirmed that the pebble-shaped deposits, etc. could be moved and that hard rock-like deposits that could not be gripped may exist.

Bottom of the pedestal (after being processed in panoramic image visualization)

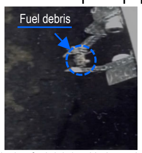
・In October 2020, a deposits contact investigation at the PCV penetration (X-6 penetration) was conducted. This confirmed that deposits inside the penetration had not deformed and come unstuck.



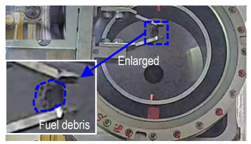
<Conditions of deposits before and after contact>


<Work in front of the penetration>

・From September 10, 2024, the end tool of the telescopic equipment passed through the isolation valve, and the trial fuel debris retrieval commenced. On October 30, fuel debris was gripped with the end tool, on November 2, the guide pipe was pulled off, and the telescopic equipment was stored in the enclosure. On November 7, fuel debris was carried out from the hatch on a side of the enclosure, and the trial retrieval was completed.



Gripping fuel debris with the end tool



Collecting gripped fuel debris in the transportation box

Unit 2 PCV internal investigation

Investigations inside the PCV	1st (2012.1)	- Acquiring images - Measuring the air temperature
	2nd (2012.3)	- Confirming water surface - Measuring the water temperature - Measuring the dose rate
	3rd (2013.2 – 2014.6)	- Acquiring images - Sampling stagnant water - Measuring water level - Installing permanent monitoring instrumentation
	4th (2017.1-2)	- Acquiring images - Measuring the dose rate - Measuring the air temperature
	5th (2018.1)	- Acquiring images - Measuring the dose rate - Measuring the air temperature
	6th (2019.2)	- Acquiring images - Measuring the dose rate - Measuring the air temperature - Determining characteristics of a portion of deposit
Leakage points from PCV		- No leakage from the torus chamber rooftop - No leakage from any internal/external surfaces of S/C
Evaluation of the location of fuel debris inside the reactor by measurement using muons The existence of high-density materials, which were considered to constitute fuel debris, was confirmed at the bottom of RPV and in the lower part and outer periphery of the reactor core. It was assumed that a significant portion of fuel debris existed at the bottom of RPV. (2016.3-7)		

Unit 3 Investigation overview

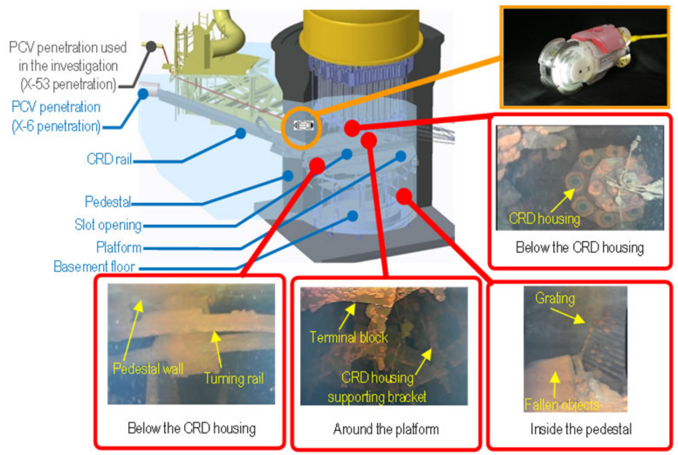
・In October 2014, the conditions of X-53 penetration, which may be under water and which is scheduled for use to investigate the inside of the PCV, were investigated via remote-controlled ultrasonic test equipment. The results showed that the penetration was not under water.

・In October 2015, to confirm the conditions inside the PCV, an investigative device was inserted into the PCV from X-53 penetration to obtain images, data on dosage and temperature and sample stagnant water. No damage to the structure and walls inside the PCV was identified and the water level was almost identical to estimated values. In addition, the dose inside the PCV was confirmed to be lower than in other Units.

・In July 2017, the inside of the PCV was investigated using the underwater ROV (remotely operated underwater vehicle) to inspect the inside of the pedestal. Analysis of the imagery obtained in the investigation identified damage to multiple structures and the supposed core internals.

・Videos obtained in the investigation were reproduced in 3D. Based on the reproduced images, the relative positions of the structures, such as the rotating platform slipping off the rail with a portion buried in deposits, were visually understood.

<Conditions inside the pedestal>



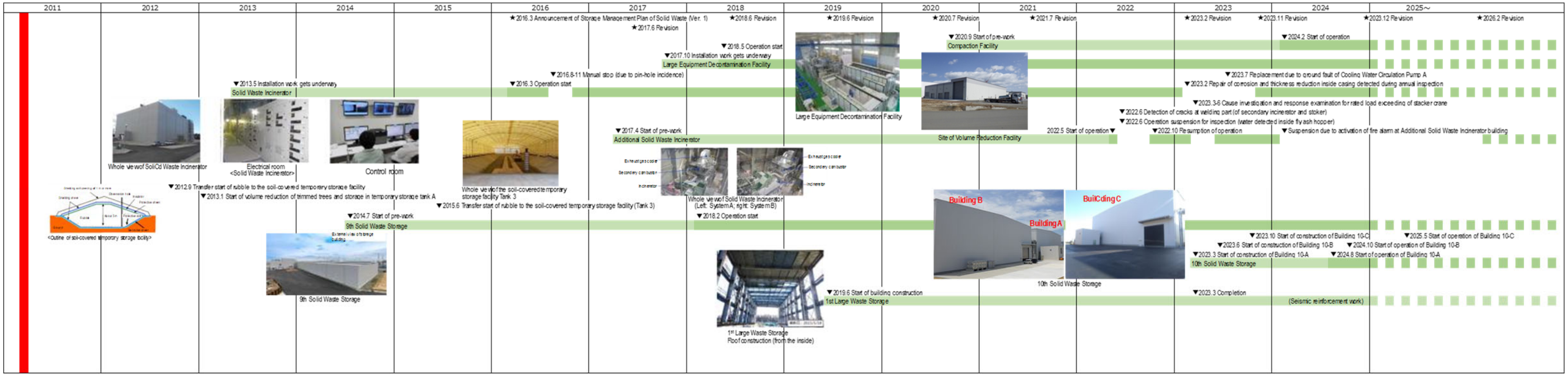
Unit 3 PCV internal investigation

Investigations inside the PCV	1st (2015.10-12)	- Acquiring images - Measuring the air temperature and dose rate - Measuring the water level and temperature - Sampling stagnant water - Installing permanent monitoring instrumentation (2015.12)
	2nd (2017.7)	- Acquiring images - Installing permanent monitoring instrumentation (2017.8)
Leakage points from PCV		- Main steam pipe bellows (identified in 2014.5)
Evaluation of the location of fuel debris inside the reactor by measurement using muons The evaluation confirmed that no large lump existed in the core area where fuel had been placed and that a portion of the fuel debris potentially existed at the bottom of the RPV. (2017.5-9)		

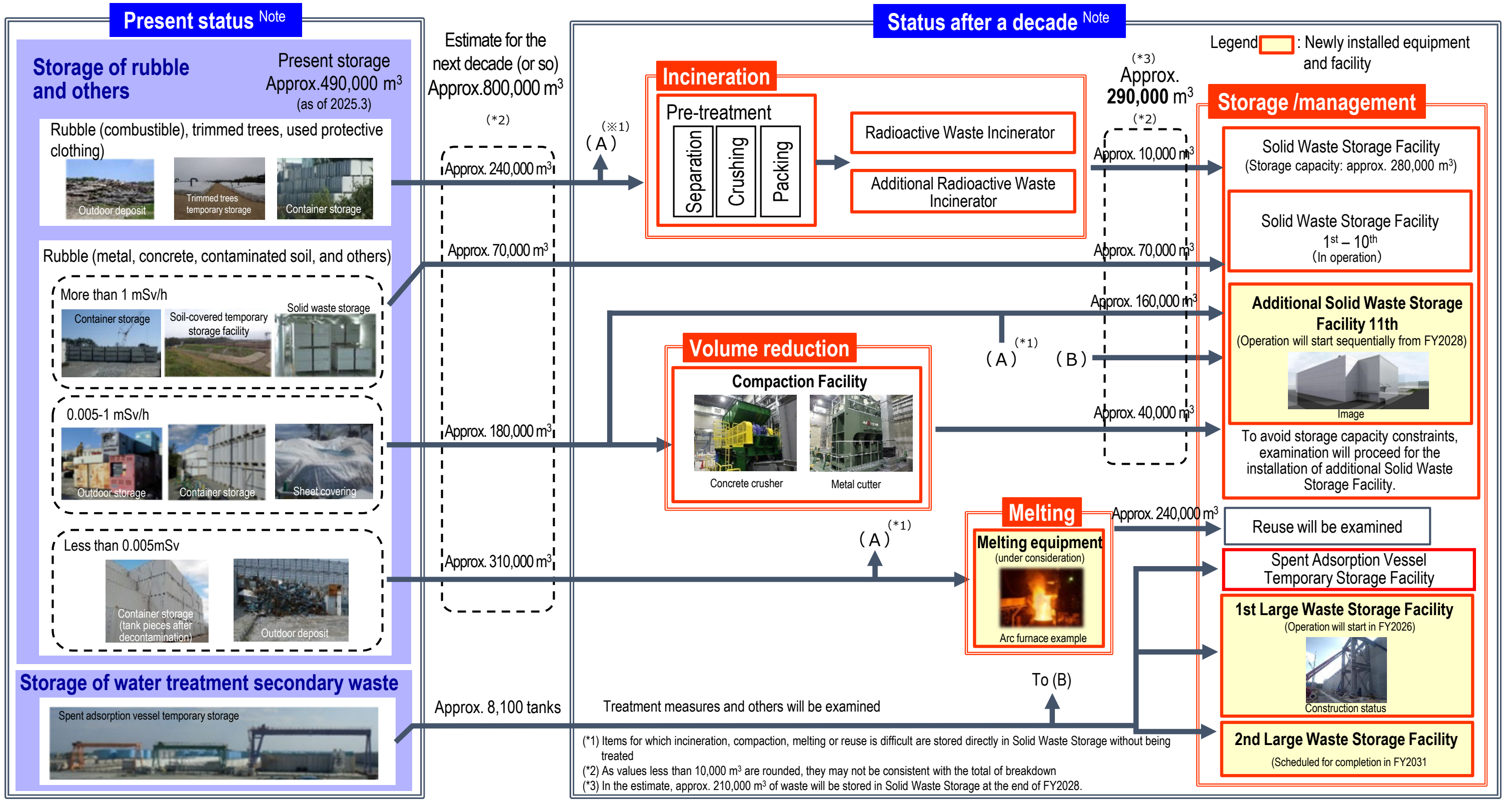
Images are provided by the International Research Institute for Nuclear Decommissioning (IRID)

5 Management of solid radioactive waste

Milestones of the Mid- and-Long-Term Roadmap (major target processes)
Eliminating temporary outdoor storage of rubble and others * Except for secondary waste of water treatment and materials for reuse or recycling (within FY2028)



● Solid Waste Storage Management Plan for the Fukushima Daiichi Nuclear Power Station (Revision in February 2026)



Note: Used protective clothing before incineration and BG-level concrete waste for which treatment and reuse is decided at present are not included.

- The exposure dose at the site boundaries will be reduced by aggregation to indoor storage and eliminating outdoor storage.
- The exposure dosage in exhaust gas from incinerators and at site boundaries is measured and announced on the website and others.

6 Improvement of work environment

While ensuring reliable exposure dose management for workers, sufficient personnel are secured. Moreover, while getting a handle on on-site needs, the work environment and labor conditions are continuously improved.

Regarding the site-wide reduction in the radiation dose and prevention of contamination spreading, the radiation dose on site was reduced by removal of rubble, topsoil and facing. Moreover, the operation was improved to use environmentally-improved areas as a Green Zone, within which workers are allowed to wear general work clothes and disposable dust-protective masks which are less of a physical burden.

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024～

▼ From March 12, 2011, in response to the increased airborne concentration of radioactive materials, instructions were issued to wear full-face masks throughout the Fukushima Daiichi NPS site, excluding the Main Anti-Earthquake Building and the rest house.

▼ From May 2013, full-face mask unnecessary area was expanded sequentially.

External view of Access Control Facility

▼ In June 2013, operation of the Access Control Facility started near the main gate of the Fukushima Daiichi NPS, to which duties conducted at J-village were shifted, including contamination examination, decontamination, switching protective equipment on and off and distribution/collection of dosimeters.

Large rest house under construction (2014.9.30)

Access Control Facility (2014.11.7)

▼ To help workers in the Fukushima Daiichi NPS precisely understand the conditions of their workplaces, a total of 86 dose-rate monitors were installed by January 2015. These monitors allow workers to confirm on-site dose rates at their workplaces in real time.

▼ In March 2015, the Fukushima revitalization meal service center opened.

▼ A large rest house for workers was established and its operation commenced in May 2015. Spaces in the large rest house are also installed for office work and collective worker safety checks as well as taking rest. In March 2016, a convenience store opened in the large rest house. In April, the shower room went into operation.

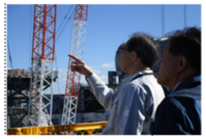
Move in general working clothes (2016.1.7)

Facing (2017.4.13)

▼ In February 2017, operation started at the Partner Companies' Building next to the New Administration Office Building.

▼ In May 2017, a heliport for emergency transport was installed inside the Fukushima Daiichi NPS and went into operation. Compared to the previous operation (at Koriyama Coast, Futaba Town or Fukushima Daini NPS, relaying to a doctor helicopter), a faster response is available for seriously ill patients requiring treatment at external medical institutions.

▼ From November 2018, from the west-side high-ground area, where Units 1-4 can be viewed, visitors can see the site in their normal clothes without having to change.



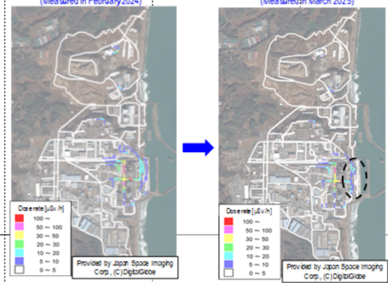
Visit by Governor of Fukushima Prefecture to the Fukushima Daiichi NPS (2018.11.1)

Visit by Prime Minister Kishida to the Fukushima Daiichi NPS (2021.10.17)

Visit by Prime Minister Ishiba to the Fukushima Daiichi NPS (2024.12.14)
(Left) Observation of the decommissioning state at high ground from which whole view of Units 1-4 can be seen
(Right) Encouragement from Prime Minister Ishiba

<Travel survey results of major roads within the site>
Compared with the last fiscal year, the dose rate was reduced on roads on the east side of Units 1-4 (area of black dot in the figure). In the area, the dose rate reduction is considered attributable to the construction of sea walls and others.

<FY2023 4th Quarter> (Measured in February 2024)　　<FY2024 4th Quarter> (Measured in March 2025)



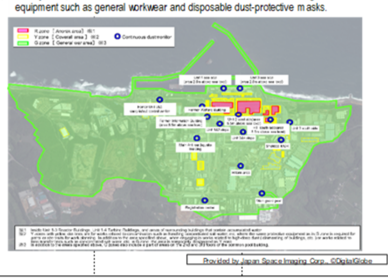
▼ In May 2013, areas excluding those around Unit 1-4, tank areas and rubble storage areas were set to full-face mask unnecessary areas.

▼ In May 2015, full-face mask unnecessary area was expanded to cover about 90% of the site.

▼ In March 2016, based on the progress of measures to reduce the environmental dosage on site, the site was categorized into two zones: Highly contaminated area around Units 1-4 buildings, etc. and other areas where limited operation started to optimize protective equipment according to each category.

▼ In March 2017, the G-zone area was expanded (to cover 95% of the whole site).

▼ In May 2018, within about 96% of the site, workers are allowed to wear light equipment such as general workwear and disposable dust-protective masks.



▼ In August 2021, operation started while eliminating the need for the DS2 mask during light work in G-zone outside the protection area around Unit 1-4 (except for inside Units 5 and 6).