

Information (17:00), October 29, 2021

To All Missions (Embassies, Consular posts and International Organizations in Japan)

Report on the discharge record and the seawater monitoring results at Fukushima Daiichi Nuclear Power Station during September

The Ministry of Foreign Affairs wishes to provide all international Missions in Japan with a report on the discharge record and seawater monitoring results with regard to groundwater pumped from the sub-drain and groundwater drain systems, as well as, bypassing groundwater pumped during the month of September at Fukushima Daiichi Nuclear Power Station (NPS).

1. Summary of decommissioning and contaminated water management

In September, the summary of monthly progress on decommissioning and contaminated water management of Fukushima Daiichi NPS was issued shown in Appendix 1. For more information, please see the following URL:

<https://www.meti.go.jp/english/earthquake/nuclear/decommissioning/pdf/mp202109.pdf>

2. Sub-drain and Groundwater Drain Systems

In September, purified groundwater pumped from the sub-drain and groundwater drain systems was discharged on the dates shown in Appendix 2. Prior to every discharge, an analysis on the quality of the purified groundwater to be discharged was conducted by Tokyo Electric Power Company (TEPCO) and the results were announced.

All the test results during the month of September have confirmed that the radiation levels of sampled water were substantially below the operational targets set by TEPCO (these operational targets are well below the density limit specified by the Reactor Regulation). The results of these analyses were also confirmed by third-party organization (Tohoku Ryokka Kankyohozen Co.).

In addition, TEPCO and Japan Atomic Energy Agency (JAEA), at the request of the Government of Japan, regularly conduct more detailed analyses on the purified groundwater. The results of JAEA's latest analyses confirmed that TEPCO's analyses were accurate and verified that the radiation levels of sampled groundwater was substantially below the operational target (see Appendix 3).

Moreover, TEPCO publishes the results of analyses conducted on seawater sampled during the discharge operation at the nearest seawater sampling post from the discharge point (see Appendix 4). The results show that the radiation levels of seawater remain lower than the density limit specified by the Reactor Regulation and significant change in the radioactivity has not been observed.

2. Groundwater Bypassing

In September, the pumped bypassing groundwater was discharged on the dates shown in Appendix 5. Prior to every discharge, an analysis on the quality of the groundwater to be discharged was conducted by TEPCO and the results were announced.

All the test results during the month of September have confirmed that the radiation levels of sampled water were substantially below the operational targets set by TEPCO (these operational targets are well below the density limit specified by the Reactor Regulation). The results of these analyses were also confirmed by Japan Chemical Analysis Center.

In addition, TEPCO and JAEA, at the request of the Government of Japan, regularly conduct more detailed analyses on the groundwater. The results of JAEA's latest analyses confirmed that TEPCO's analyses were accurate and verified that the radiation levels of the sampled groundwater were substantially below the operational target (see Appendix 6).

Moreover, TEPCO publishes analysis results on seawater sampled during the discharge operation at the nearest seawater sampling post from the discharge point (see Appendix 7). The result shows that the radiation levels in seawater remain lower than the density limit specified by the Reactor Regulation and significant change in the radioactivity has not been observed. The analysis had been conducted once a month until March 2017. Since April 2017, it is conducted four times a year because there has been no significant fluctuation in the concentration of radioactive materials in the sea water, and no influence on the surrounding environment has been confirmed.

The sampling process for analyses conducted this month is the same as the one conducted in the information disseminated last month. Results of the analyses are shown in the attached appendices:

(For further information, please contact TEPCO at (Tel: 03-6373-1111) or refer to the TEPCO's website:

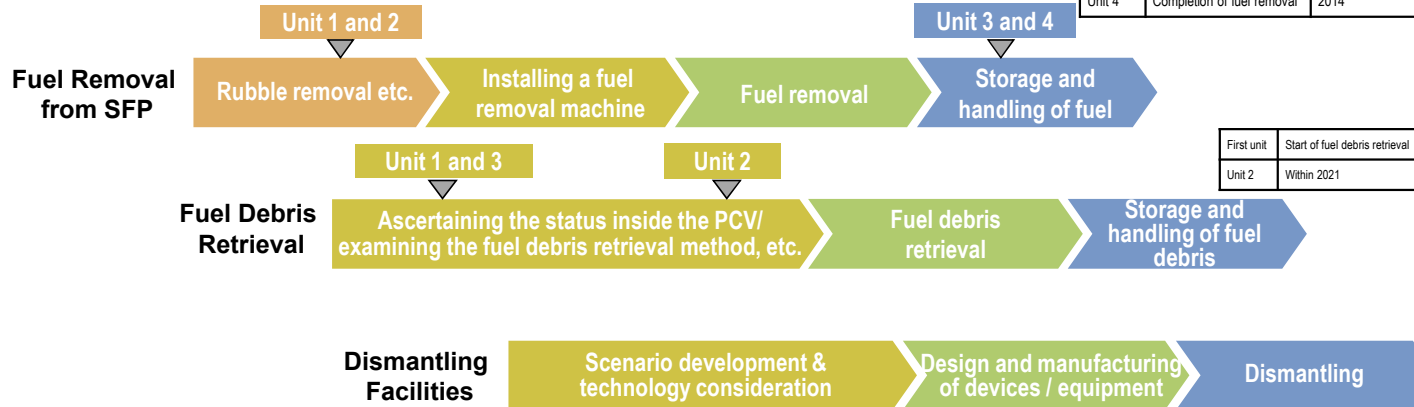
<http://www.tepco.co.jp/en/nu/fukushima-np/handouts/index-e.html>)

Contact: International Nuclear Cooperation Division,
Ministry of Foreign Affairs, Tel 03-5501-8227

Main decommissioning work and steps

Fuel removal from the spent fuel pool was completed in December 2014 at Unit 4 and on February 28, 2021 at Unit 3.
 Work continues sequentially toward the start of fuel removal from Units 1 and 2 and debris (Note 1) retrieval from Units 1-3.
 (Note 1) Fuel assemblies having melted through in the accident.

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
Unit 3	Completion of fuel removal	Within FY2020
Unit 4	Completion of fuel removal	2014



First unit	Start of fuel debris retrieval
Unit 2	Within 2021

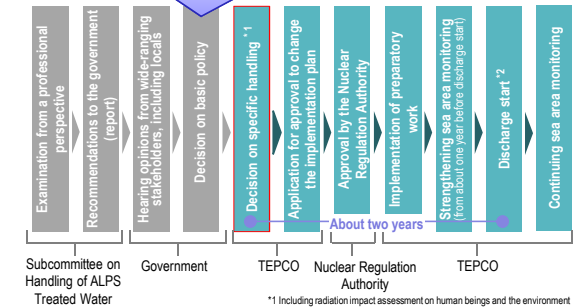
Measures of treated water

Appendix 1

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, monitoring will be further enhanced and objectivity and transparency ensured by engaging with third-party experts and having safety checked by the IAEA. Moreover, accurate information will be disseminated continuously and fully transparently.

Decided in "The Inter-Ministerial Council for Contaminated Water, Treated Water and Decommissioning issues" held on April 13.



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

Contaminated water management – triple-pronged efforts -

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

- "Remove" the source of water contamination
- "Redirect" fresh water from contaminated areas
- "Retain" contaminated water from leakage

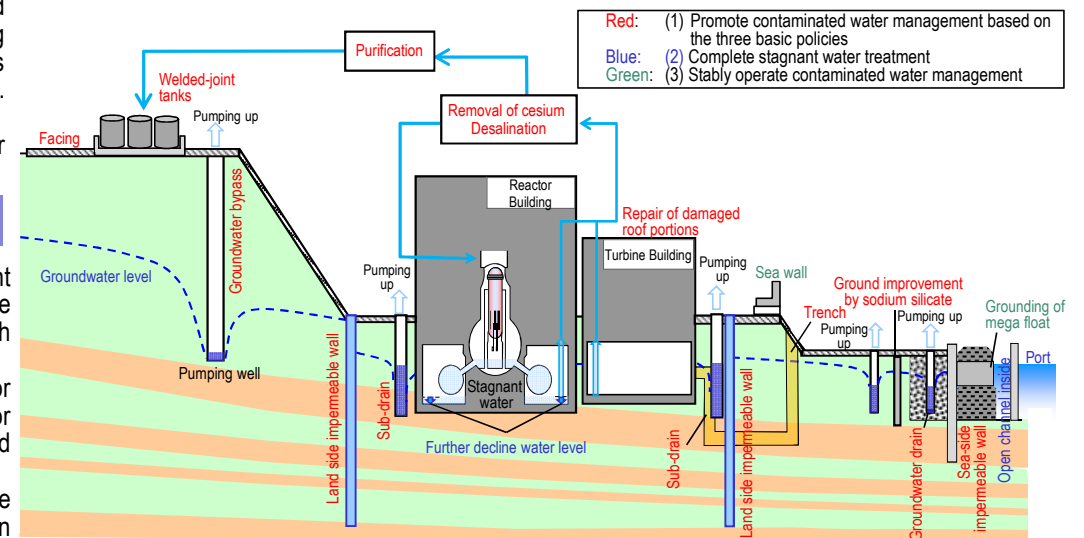
- Strontium-reduced water from other equipment is being re-treated in the multi-nuclide removal equipment (ALPS) and stored in welded-joint tanks.
- Multi-layered contaminated water management measures, including land-side impermeable walls and sub-drains, have stabilized the groundwater at a low level and the increased contaminated water generated during rainfall is being suppressed by repairing damaged portions of building roofs, facing onsite, etc. Through these measures, the generation of contaminated water was reduced from approx. 540 m³/day (in May 2014) to approx. 180 m³/day (in FY2019) and approx. 140 m³/day (in 2020).
- Measures continue to further suppress the generation of contaminated water to 100 m³/day or less within 2025.

(2) Efforts to complete stagnant water treatment

- To lower the stagnant water levels in buildings as planned, work to install additional stagnant water transfer equipment is underway. At present, the floor surface exposure condition can be maintained except for the Unit 1-3 Reactor Buildings, Process Main Building and the High Temperature Incinerator Building.
- In 2020, treatment of stagnant water in buildings was completed, except for the Unit 1-3 Reactor Buildings, Process Main Building and High-Temperature Incinerator Building. For Reactor Buildings, the amount of stagnant water there will be reduced to about half the amount at the end of 2020 during the period FY2022-2024.
- For Zeolite sandbags on the basement floors of the Process Main Building and High-Temperature Incinerator Building, measures to reduce the radiation dose are being examined with stabilization in mind.

(3) Efforts to stably operate contaminated water management

- To prepare for tsunamis, various measures are underway. For heavy rain, sandbags are being installed to suppress direct inflow into buildings while work closing building openings and installing sea walls to enhance drainage channels and other measures are being implemented as planned.



Red: (1) Promote contaminated water management based on the three basic policies
 Blue: (2) Complete stagnant water treatment
 Green: (3) Stably operate contaminated water management

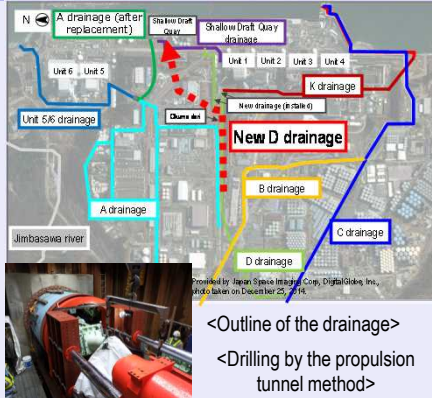
Progress status

◆ The temperatures of the Reactor Pressure Vessel (RPV) and Primary Containment Vessel (PCV) of Units 1-3 have been maintained within the range of approx. 25-35°C¹ over the past month. There was no significant change in the concentration of radioactive materials newly released from Reactor Buildings into the air². It was concluded that the comprehensive cold shutdown condition had been maintained.

* 1 The values varied somewhat, depending on the unit and location of the thermometer.
* 2 In August 2021, the radiation exposure dose due to the release of radioactive materials from the Unit 1-4 Reactor Buildings was evaluated at less than 0.00005 mSv/year at the site boundary. The annual radiation dose from natural radiation is approx. 2.1 mSv/year (average in Japan).

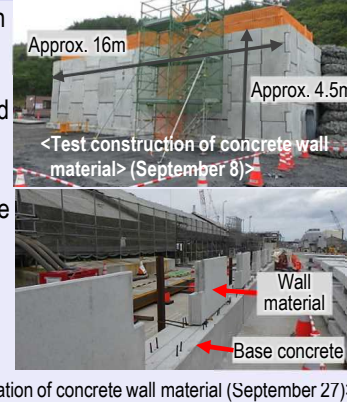
To eliminate the risk of heavy rain from an early stage, drilling of the new D drainage channel started

To eliminate the risk of heavy rain from an early stage, there is a plan to install the new D drainage channel, a total of approx. 800m from the existing D drainage to the inside of the port. From September 6, drilling started by the propulsion tunnel method. To install the channel before the 2022 typhoon season, work proceeds safely.



Construction of the Japan Trench Tsunami Seawall and others is steadily progressing

The test construction of the Japan Trench Tsunami Seawall started from June and as the construction procedures were confirmed, work to install concrete wall material for the seawall construction started from September 14. Toward completion in the 2nd half of FY2023, construction is underway and on schedule. Furthermore, work is underway to arrange the filtered water tank west side area, a high ground to which the Water-Treatment Facility special for Sub-drain & Groundwater will be transferred. Work of function transfer and others will be completed at the end of FY2023 – early FY2024.



Transfer of slurry in the High-Integrity Container and response to the damage to the exhaust filter

Work to transfer slurry (sediment) in the High-Integrity Container (HIC) was suspended on August 24 as the dust concentration at the outlet of the HIC exhaust filter increased. Subsequently, countermeasures such as installing an alternative filter were implemented and the transfer of the first HIC by the transfer equipment was completed on September 28. In response to the damage to this HIC exhaust filter, HIC exhaust filters connecting to the multi-nuclide removal equipment (ALPS) were inspected, whereupon similar damage was detected. (* Similar damage was also detected when replacing exhaust filters two years ago.) Furthermore, exhaust filters inside ALPS were also inspected, with damage detected in 32 of a total of 76 filters (including damage to HIC of the ALPS).

Exhaust filters constitute ancillary equipment different from the purification function such as pretreatment facilities and the purification performance of ALPS remains unaffected. Moreover, there was no body contamination or intake of workers and it was evaluated that there were no influence on the outside. Inspection continues for exhaust filters of other facilities, causes of damages and others will be investigated, and countermeasures implemented from the perspective of facilities, operation and maintenance.

Removed fuel (assemblies) **566/566**
(Fuel removal completed on February 28, 2021)

Removed fuel (assemblies) **1535/1535*1**
(Fuel removal completed on December 22, 2014)

Removed fuel (assemblies) **1568/1568**
Installation of frozen pipes completed on Nov 9, 2015

* 1 Including two new fuel assemblies removed first in 2012.

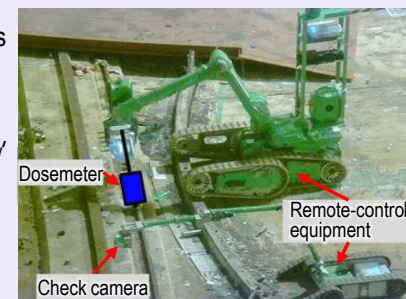
Construction steadily progressing toward starting Unit 2 fuel removal

Toward starting Unit 2 spent fuel removal in FY2024-2026, work is underway inside and outside the building. Outside the building, with the installation of the gantry for fuel removal in the 1st half of FY2022 in mind, pre-work such as removing interferences is underway. Subsequently, ground improvement will start from late October. Inside the building, toward installing the shielding in FY2021, decontamination work is underway on the top floor of the Reactor Building. At present, rough decontamination on the floor surface was completed and decontamination of the high area is being prepared.



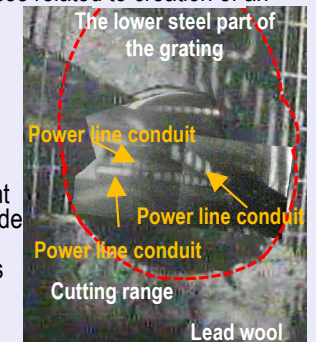
Investigation utilizing the existing drilled hole of the shield plug inside the Unit 2 Reactor Building top floor

A dose investigation from the existing drilled hole of the Unit 2 shield plug was conducted from August to September. Based on the results, assumptions were made, including that radioactive materials, including cesium, were highly likely to adhere to and accumulate in upper and middle sections of the shield plug. Subsequently, to understand the contamination conditions more accurately, dose investigations will be conducted over the shield plug from October and the new drilled hole from December.



Toward the Unit 1 PCV internal investigation, work to eliminate interferences was completed

Toward the internal investigation of the Unit 1 Primary Containment Vessel (PCV), all work to eliminate interferences related to creation of an access route was completed on September 17. After this, pre-work will be implemented, including pulling out the AWJ (Abrasive Water Jet) equipment and inserting the guide pipe. Pre-work continues toward starting the PCV internal investigation within FY2021.



Results of analyses on the quality of the purified groundwater pumped from the sub-drain and groundwater drain systems at Fukushima Daiichi NPS (made available by TEPCO prior to discharge)

(Unit: Bq/L)

Date of sampling *Date of discharge	Detected nuclides	Analytical body	
		TEPCO	Third-party organization
September 25 th , 2021 *Discharged on September 30 th	Cs-134	ND (0.72)	ND (0.54)
	Cs-137	ND (0.73)	ND (0.69)
	Gross β	ND (1.7)	ND (0.34)
	H-3	920	970
September 24 th , 2021 *Discharged on September 29 th	Cs-134	ND (0.61)	ND (0.48)
	Cs-137	ND (0.73)	ND (0.54)
	Gross β	ND (2.1)	ND (0.35)
	H-3	970	970
September 23 rd , 2021 *Discharged on September 28 th	Cs-134	ND (0.53)	ND (0.51)
	Cs-137	ND (0.54)	ND (0.71)
	Gross β	ND (1.9)	ND (0.37)
	H-3	930	930
September 22 nd , 2021 *Discharged on September 27 th	Cs-134	ND (0.67)	ND (0.58)
	Cs-137	ND (0.54)	ND (0.66)
	Gross β	ND (1.8)	ND (0.29)
	H-3	870	930
September 21 st , 2021 *Discharged on September 26 th	Cs-134	ND (0.72)	ND (0.60)
	Cs-137	ND (0.69)	ND (0.58)
	Gross β	ND (1.9)	ND (0.32)
	H-3	880	900
September 20 th , 2021 *Discharged on September 25 th	Cs-134	ND (0.70)	ND (0.58)
	Cs-137	ND (0.54)	ND (0.58)
	Gross β	ND (1.9)	ND (0.34)
	H-3	900	940
September 19 th , 2021 *Discharged on September 24 th	Cs-134	ND (0.75)	ND (0.72)
	Cs-137	ND (0.73)	ND (0.66)
	Gross β	ND (0.55)	ND (0.29)
	H-3	910	930
September 18 th , 2021 *Discharged on September 23 rd	Cs-134	ND (0.63)	ND (0.82)
	Cs-137	ND (0.65)	ND (0.57)
	Gross β	ND (1.8)	ND (0.37)
	H-3	890	920

September 18 th , 2021 *Discharged on September 23 rd	Cs-134	ND (0.61)	ND (0.78)
	Cs-137	ND (0.73)	ND (0.63)
	Gross β	ND (1.8)	ND (0.34)
	H-3	880	900
September 17 th , 2021 *Discharged on September 22 nd	Cs-134	ND (0.68)	ND (0.67)
	Cs-137	ND (0.65)	ND (0.53)
	Gross β	ND (1.6)	ND (0.34)
	H-3	820	840
September 16 th , 2021 *Discharged on September 21 st	Cs-134	ND (0.63)	ND (0.64)
	Cs-137	ND (0.47)	ND (0.63)
	Gross β	ND (1.6)	ND (0.34)
	H-3	940	950
September 15 th , 2021 *Discharged on September 20 th	Cs-134	ND (0.67)	ND (0.57)
	Cs-137	ND (0.73)	ND (0.69)
	Gross β	ND (2.0)	ND (0.32)
	H-3	920	940
September 14 th , 2021 *Discharged on September 19 th	Cs-134	ND (0.63)	ND (0.70)
	Cs-137	ND (0.65)	ND (0.66)
	Gross β	ND (2.0)	ND (0.33)
	H-3	900	920
September 13 th , 2021 *Discharged on September 18 th	Cs-134	ND (0.53)	ND (0.70)
	Cs-137	ND (0.54)	ND (0.63)
	Gross β	ND (1.8)	ND (0.33)
	H-3	800	800
September 12 th , 2021 *Discharged on September 17 th	Cs-134	ND (0.63)	ND (0.62)
	Cs-137	ND (0.69)	ND (0.51)
	Gross β	ND (1.8)	ND (0.35)
	H-3	680	700
September 12 th , 2021 *Discharged on September 17 th	Cs-134	ND (0.82)	ND (0.43)
	Cs-137	ND (0.47)	ND (0.61)
	Gross β	ND (2.1)	ND (0.35)
	H-3	830	840
September 11 th , 2021 *Discharged on September 16 th	Cs-134	ND (0.61)	ND (0.68)
	Cs-137	ND (0.60)	ND (0.76)
	Gross β	ND (1.7)	ND (0.33)
	H-3	880	890
September 10 th , 2021 *Discharged on September 15 th	Cs-134	ND (0.68)	ND (0.47)
	Cs-137	ND (0.60)	ND (0.69)
	Gross β	ND (0.70)	ND (0.31)
	H-3	830	830

September 9 th , 2021 *Discharged on September 14 th	Cs-134	ND (0.64)	ND (0.67)
	Cs-137	ND (0.69)	ND (0.66)
	Gross β	ND (1.9)	ND (0.34)
	H-3	800	800
September 9 th , 2021 *Discharged on September 14 th	Cs-134	ND (0.68)	ND (0.54)
	Cs-137	ND (0.54)	ND (0.66)
	Gross β	ND (1.9)	ND (0.32)
	H-3	810	820
September 8 th , 2021 *Discharged on September 13 th	Cs-134	ND (0.49)	ND (0.60)
	Cs-137	ND (0.69)	ND (0.61)
	Gross β	ND (2.0)	ND (0.32)
	H-3	970	970
September 7 th , 2021 *Discharged on September 12 th	Cs-134	ND (0.82)	ND (0.54)
	Cs-137	ND (0.65)	ND (0.66)
	Gross β	ND (1.9)	ND (0.39)
	H-3	940	940
September 6 th , 2021 *Discharged on September 11 th	Cs-134	ND (0.70)	ND (0.69)
	Cs-137	ND (0.47)	ND (0.78)
	Gross β	ND (2.1)	ND (0.34)
	H-3	830	850
September 5 th , 2021 *Discharged on September 10 th	Cs-134	ND (0.78)	ND (0.52)
	Cs-137	ND (0.54)	ND (0.77)
	Gross β	ND (1.8)	ND (0.33)
	H-3	860	890
September 4 th , 2021 *Discharged on September 9 th	Cs-134	ND (0.76)	ND (0.66)
	Cs-137	ND (0.65)	ND (0.89)
	Gross β	ND (1.7)	ND (0.35)
	H-3	810	830
September 4 th , 2021 *Discharged on September 9 th	Cs-134	ND (0.78)	ND (0.78)
	Cs-137	ND (0.65)	ND (0.72)
	Gross β	ND (2.0)	ND (0.36)
	H-3	830	850
September 3 rd , 2021 *Discharged on September 8 th	Cs-134	ND (0.69)	ND (0.80)
	Cs-137	ND (0.60)	ND (0.67)
	Gross β	ND (1.8)	ND (0.36)
	H-3	900	920
September 2 nd , 2021 *Discharged on September 7 th	Cs-134	ND (0.72)	ND (0.68)
	Cs-137	ND (0.65)	ND (0.67)
	Gross β	ND (1.8)	ND (0.36)
	H-3	900	920

September 1 st , 2021 *Discharged on September 6 th	Cs-134	ND (0.61)	ND (0.66)
	Cs-137	ND (0.65)	ND (0.77)
	Gross β	ND (0.65)	ND (0.37)
	H-3	890	920
August 31 st , 2021 *Discharged on September 5 th	Cs-134	ND (0.53)	ND (0.72)
	Cs-137	ND (0.65)	ND (0.72)
	Gross β	ND (2.1)	ND (0.37)
	H-3	780	780
August 30 th , 2021 *Discharged on September 4 th	Cs-134	ND (0.56)	ND (0.69)
	Cs-137	ND (0.65)	ND (0.61)
	Gross β	ND (1.9)	ND (0.41)
	H-3	800	820
August 29 th , 2021 *Discharged on September 3 rd	Cs-134	ND (0.72)	ND (0.61)
	Cs-137	ND (0.60)	ND (0.71)
	Gross β	ND (1.9)	ND (0.38)
	H-3	860	870
August 28 th , 2021 *Discharged on September 2 nd	Cs-134	ND (0.79)	ND (0.66)
	Cs-137	ND (0.69)	ND (0.81)
	Gross β	ND (0.66)	ND (0.34)
	H-3	780	790
August 27 th , 2021 *Discharged on September 1 st	Cs-134	ND (0.87)	ND (0.71)
	Cs-137	ND (0.60)	ND (0.72)
	Gross β	ND (2.0)	ND (0.36)
	H-3	720	750

- * * ND: represents a value below the detection limit; values in () represent the detection limit.
- * In order to ensure the results, third-party organizations have also conducted an analysis and verified the radiation level of the sampled water.
- * Third-party organization : Tohoku Ryokka Kankyohozen Co., Ltd

Result of detailed analyses conducted by TEPCO, JAEA, and Japan Chemical Analysis Center (In order to confirm the validity of analysis, the Government of Japan also requests JAEA; and TEPCO requests Japan Chemical Analysis Center to conduct independent analyses)

(Unit: Bq/L)

Date of sampling	Detected nuclides	Analytical body		
		JAEA	TEPCO	Japan Chemical Analysis Center
August 1 st ,2021	Cs-134	ND (0.0028)	ND (0.0046)	ND (0.0069)
	Cs-137	0.0067	0.0085	0.0083
	Gross α	ND (0.50)	ND (3.4)	ND (2.4)
	Gross β	ND (0.38)	ND (0.64)	ND (0.47)
	H-3	650	630	650
	Sr-90	0.0069	0.0076	0.0060

* ND: represents a value below the detection limit; values in () represent the detection limit.

Results of analysis on the seawater sampled near the discharge point (North side of Units 5 and 6 discharge channel)

(Unit: Bq/L)

Date of sampling	Detected nuclides	Sampling point (South discharge channel)
September 9 th , 2021 *Sampled before discharge of purified groundwater.	Cs-134	ND (0.61)
	Cs-137	ND (0.65)
	Gross β	10
	H-3	ND (1.8)

(Reference)

(Unit: Bq/L)

Radionuclides	Operational Targets	Density Limit specified by the Reactor Regulation	World Health Organization (WHO) Guidelines for Drinking Water Quality
Cs-134	1	60	10
Cs-137	1	90	10
Gross α	—	—	—
Gross β	3 (1) ※	—	—
H-3	1,500	60,000	10,000
Sr-90	—	30	10

※ The operational target of Gross β is 1 Bq/L in the survey which is conducted once every ten days.

Results of analyses on the water quality of the groundwater pumped up for bypassing at Fukushima Daiichi NPS (made available by TEPCO prior to discharge)

(Unit: Bq/L)

Date of sampling *Date of discharge	Detected nuclides	Analytical body	
		TEPCO	Japan Chemical Analysis Center
September 21 st , 2021 *Discharged on September 29 th	Cs-134	ND (0.63)	ND (0.46)
	Cs-137	ND (0.73)	ND (0.66)
	Gross β	ND (0.70)	ND (0.33)
	H-3	64	66
September 11 th , 2021 *Discharged on September 19 th	Cs-134	ND (0.86)	ND (0.48)
	Cs-137	ND (0.63)	ND (0.50)
	Gross β	ND (0.65)	ND (0.62)
	H-3	65	62
September 6 th , 2021 *Discharged on September 15 th	Cs-134	ND (0.53)	ND (0.37)
	Cs-137	ND (0.65)	ND (0.43)
	Gross β	ND (0.59)	ND (0.48)
	H-3	57	58
September 1 st , 2021 *Discharged on September 9 th	Cs-134	ND (0.59)	ND (0.37)
	Cs-137	ND (0.70)	ND (0.49)
	Gross β	ND (0.58)	ND (0.59)
	H-3	61	62
August 25 th , 2021 *Discharged on September 2 nd	Cs-134	ND (0.77)	ND (0.53)
	Cs-137	ND (0.65)	ND (0.43)
	Gross β	ND (0.67)	ND (0.52)
	H-3	55	55

- * * ND: represents a value below the detection limit; values in () represent the detection limit
- * In order to ensure the results, Japan Chemical Analysis Center, a third-party organization, has also conducted an analysis and verified the radiation level of the sampled water.

Result of detailed analyses conducted by TEPCO, JAEA, and Japan Chemical Analysis Center (In order to confirm the validity of analysis, the Government of Japan also requests JAEA; and TEPCO requests Japan Chemical Analysis Center to conduct independent analyses)

(Unit: Bq/L)

Date of sampling	Detected nuclides	Analytical body		
		JAEA	TEPCO	Japan Chemical Analysis Center
August 4 th , 2021	Cs-134	ND (0.0028)	ND (0.0039)	ND (0.0059)
	Cs-137	ND (0.0021)	ND (0.0037)	ND (0.0046)
	Gross α	ND (0.45)	ND (3.4)	ND (2.4)
	Gross β	ND (0.38)	ND (0.60)	ND (0.58)
	H-3	58	57	60
	Sr-90	0.0022	ND (0.0013)	ND (0.0053)

* ND: represents a value below the detection limit; values in () represent the detection limit.

Results of analyses on the seawater sampled near the discharge point (Around South Discharge Channel)

(Unit: Bq/L)

Date of sampling ※conducted four times a year	Detected nuclides	Sampling point (South discharge channel)
September 9 th , 2021	Cs-134	ND (0.81)
	Cs-137	ND (0.65)
	Gross β	12
	H-3	3.8

(Reference)

(Unit: Bq/L)

Radionuclides	Operational Targets	Density Limit specified by the Reactor Regulation	World Health Organization (WHO) Guidelines for Drinking Water Quality
Cs-134	1	60	10
Cs-137	1	90	10
Gross α	—	—	—
Gross β	5 (1) ※	—	—
H-3	1,500	60,000	10,000
Sr-90	—	30	10

※ The operational target of Gross β is 1 Bq/L in the survey which is conducted once every ten days.