Information (17:00), September 25, 2020

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 August

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 subdrain and groundwater drain systems, as well as, bypassing groundwater pumped during the month of August at Fukushima Daiichi Nuclear Power Station (NPS).

1. Summary of decommissioning and contaminated water management

In August, the summary of monthly progress on decommissioning and contaminated water management of TEPCO's 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/mp202008.pdf

2. Subdrain and Groundwater Drain Systems

In August, purified groundwater pumped from the subdrain 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 August 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.

3. Groundwater Bypassing

In August, 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 August 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

Outline of Decommissioning and Contaminated Water Management

Secretariat of the Team for Countermeasures for Decommissioning and Contaminated Water Treatment

Main decommissioning work and steps

Fuel removal from the spent fuel pool was completed in December 2014 at Unit 4 and started from April 15, 2019 at Unit 3. Dust concentration in the surrounding environment is being monitored and work is being implemented with safety first. 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.

Fuel Removal from SFP

Units 1 & 2: Rubble removal & dose reduction → Installing fuel removal machine

Unit 3: Fuel removal

Unit 4: Storage and handling

Units 1-6	Completion of fuel removal	With n 2031
Unit 1	Start of fuel removal	FY2027 - FY2028
Unit 2	Start of fuel removal	FY2024 - FY2026
Unit 3	Completion of fuel removal	With n FY2020
Unit 4	Completion of fuel removal	2014

Fuel Debris Retrieval

Unit 1-3: Ascertaining the status inside the PCV/ examining the fuel debris retrieval method, etc. (Note 2) → Fuel debris retrieval

Unit 2: Storage and handling

First unit	Start of fuel debris retrieval
Unit 2	Within 2021

Dismantling Facilities

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

Fuel removal from the spent fuel pool

Fuel removal from the spent fuel pool started from April 15, 2019 at Unit 3. With the aim of completing fuel removal by the end of FY2020, rubble and fuel are being removed.

Fuel removal (April 15, 2019)

Removed fuel (assemblies)

315/566

(As of August 27, 2020)

Contaminated water management proceeds with the following three efforts:

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

[Three basic policies]

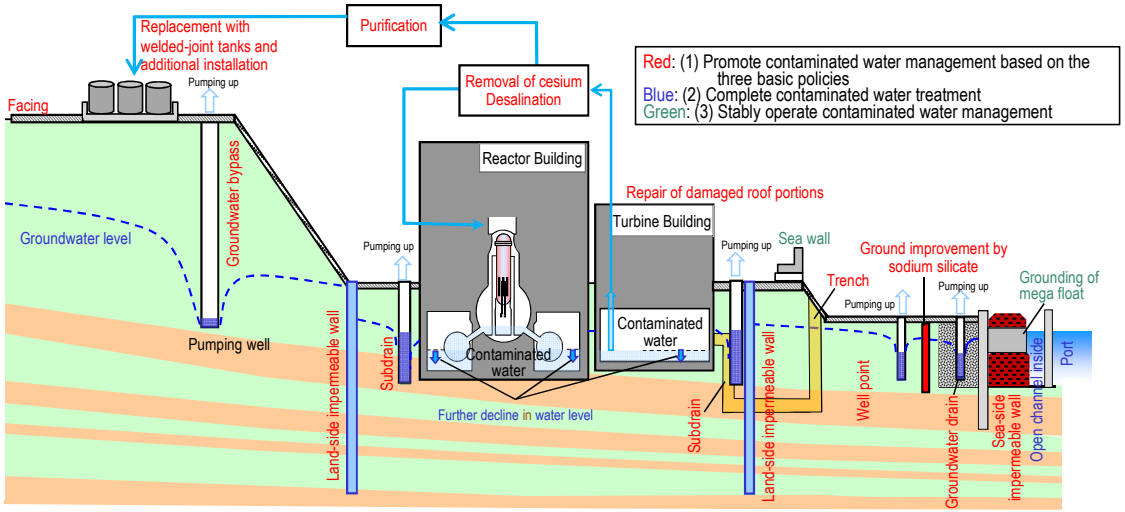
1. "Remove" the source of water contamination
2. "Redirect" fresh water from contaminated areas
3. "Retain" contaminated water from leakage

(2) Efforts to complete contaminated water treatment

4. Treatment of contaminated water in buildings
5. Measures to remove α–nuclide and reduce the concentration in contaminated water
6. Measures to alleviate the radiation dose of Zeolite sandbags in the Process Main Building and High-Temperature Incinerator Building and examine safe management methods

(3) Efforts to stably operate contaminated water management

7. Planning and implementing necessary measures to prepare for large-scale disasters such as tsunami and heavy rain
8. Periodically inspecting and updating facilities to maintain the effect of contaminated water management going forward
9. Examining additional measures as required, with efforts to gradually expand the scale of fuel debris retrieval



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

- Strontium-treated 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 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, etc. Through these measures, the generation of contaminated water was reduced from approx. 540 m^3/day (in May FY2014) to approx. 180 m^3/day (in FY2019).
- Measures continue to further suppress the generation of contaminated water to approx. 150 m^3/day within FY2020 and 100 m^3/day or less within 2025.

(2) Efforts to complete contaminated water treatment

- Contaminated water levels in buildings declined as planned and connected parts between Units 1 and 2 and 3 and 4 were respectively separated. For α-nuclide detected as water levels progressively declined, characteristics are being determined and treatment methods examined.
- Treatment of contaminated water in buildings will be completed within 2020, excluding Unit 1-3 Reactor Buildings, Process Main Building and High-Temperature Incinerator Building. For Reactor Buildings, the amount of contaminated water there will be reduced from the level 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, measures including closing building openings, installing sea walls and transferring and grounding the mega float are being implemented. For heavy rain, sandbags are being installed to suppress direct inflow into buildings while work to enhance drainage channels 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)

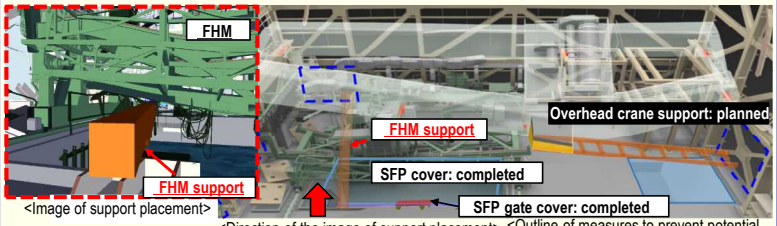
Progress status

◆ The temperatures of the Reactor Pressure Vessel (RPV) and Primary Containment Vessel (PCV) of Units 1-3 have been maintained within the range of approx. 20-40°C[*1] over the past month. There was no significant change in the concentration of radioactive materials newly released from Reactor Buildings into the air[*2]. 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 July 2020, 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).

Toward installation of support to the Unit 1 FHM

Before removing the fallen roof on the south side and other objects, to minimize the risk of the overhead crane/ fuel-handling machine shifting, becoming imbalanced and subsequently falling, materials to support the fuel-handling machine (FHM) from below will be installed. For the FHM, preparation will start from September and the installation will be completed within October.



<Image of support placement> <Direction of the image of support placement> <Outline of measures to prevent potential rubble falling and reduce risks>

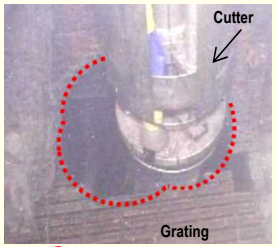
X brace removal point

Cutting of obstacles inside the PCV toward insertion of a robot to investigate inside Unit 1

As part of efforts to investigate inside the Unit 1 Primary Containment Vessel (PCV), work to cut obstacles inside the PCV on the route for the investigation equipment started from May 26.

For the defect of the abrasive supply part having occurred on July 7, the nozzle unit was replaced and the lack of any abnormality was confirmed. Work resumed from August 2 and cutting of the grating was completed on August 25.

Cutting of obstacles will continue.



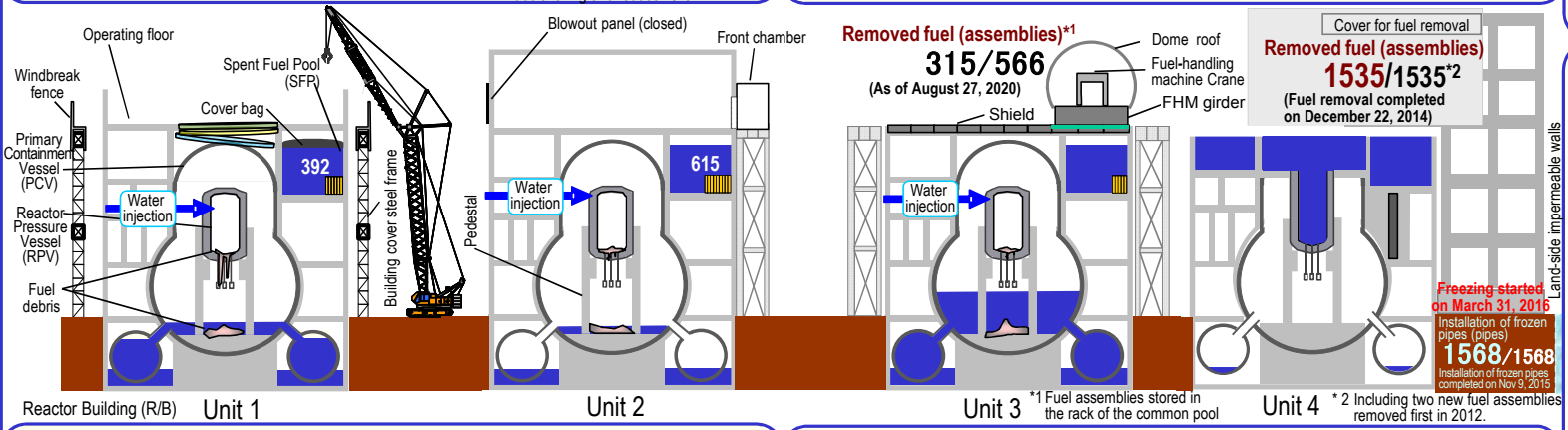
<◯ : Range of grating cutting>

Test to suspend water injection into the Unit 2 reactor (flash report)

For Unit 2, a test to suspend water injection for about eight hours was conducted in FY2019 to optimize the emergency response procedures.

A test to suspend water injection was also conducted for longer (period: August 17-20 (about 74 hours)) to verify the reproducibility of the temperature evaluation model while suspending water injection to the reactor and examine how best to inject water in future.

During the suspension period, temperatures at the RPV bottom and PCV increased by about 11.5 and 0.5°C respectively, showing variation almost within the assumed range.



*1 Fuel assemblies stored in the rack of the common pool

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

Ongoing Unit 3 fuel removal proceeding steadily

Since the resumption on May 26, the fuel removal has progressed steadily and 315 of 566 fuel assemblies were removed.

At the same time, rubble removal also proceeded steadily. On August 24, a lifting test was conducted for one fuel assembly with a deformed handle, which was excluded from the previous lifting test in May, and one fuel assembly, with which a deformed handle was detected after the previous lifting test. Based on the test results, it was confirmed that both fuel assemblies could be lifted.

<Lifting test>

<Fuel assemblies for the lifting test*>

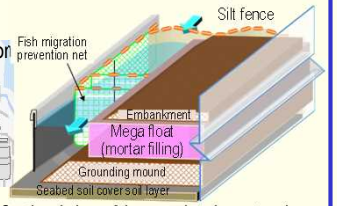
* Fuel assembly excluded from the lifting test in May due to interference with pipes detected during the test.

Completion of mega float grounding to reduce the tsunami risk

To reduce the risk of floating due to tsunamis, work is being implemented to transfer the mega float to the inside of the Unit 1-4 open channel and utilize it as a bank.

Filling mortar into the mega float started from April and its grounding was completed on August 3. This work reduced the risk of floating due to tsunamis.

<Location of mega float grounding>



<Sectional view of the completed construction>

Treatment completion of temporarily stored Sr-treated water

Treatment of Sr-treated water temporarily stored while awaiting treatment of multi-nuclide removal equipment and other facilities was completed on August 8, except for operation tanks necessary to treat the contaminated water generated daily.

Following the completed treatment of Sr-treated water, performance verification of secondary treatment will commence from September 2020 for water treated by the multi-nuclide removal equipment or other facilities and its sum of concentration ratios required by law*, except for tritium, is 100 or more (approx. 2,000 m³). The performance verification will involve checking that the sum of concentration ratios required by law, except for tritium, is reduced to less than 1 following treatment by multi-nuclide removal equipment or other facilities. The procedures and process of nuclide analysis and others will also be reconfirmed.

* The sum of concentration ratios calculated to the concentration limits required by law as specified for each radioactive material.

Appendix 2

Results of analyses on the quality of the purified groundwater pumped from the subdrain 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
August 26th, 2020 *Discharged on August 31st	Cs-134	ND (0.67)	ND (0.72)
	Cs-137	ND (0.60)	ND (0.67)
	Gross β	ND (2.0)	ND (0.34)
	H-3	870	930
August 25th, 2020 *Discharged on August 30th	Cs-134	ND (0.60)	ND (0.65)
	Cs-137	ND (0.60)	ND (0.58)
	Gross β	ND (1.9)	ND (0.36)
	H-3	880	930
August 24th, 2020 *Discharged on August 29th	Cs-134	ND (0.60)	ND (0.72)
	Cs-137	ND (0.73)	ND (0.69)
	Gross β	ND (2.0)	ND (0.37)
	H-3	900	960
August 23rd, 2020 *Discharged on August 28th	Cs-134	ND (0.75)	ND (0.55)
	Cs-137	ND (0.65)	ND (0.58)
	Gross β	ND (2.2)	ND (0.40)
	H-3	990	1,100
August 22nd, 2020 *Discharged on August 27th	Cs-134	ND (0.70)	ND (0.74)
	Cs-137	ND (0.65)	ND (0.63)
	Gross β	ND (1.8)	ND (0.34)
	H-3	1,000	1,100
August 21st, 2020 *Discharged on August 26th	Cs-134	ND (0.55)	ND (0.54)
	Cs-137	ND (0.54)	ND (0.66)
	Gross β	ND (2.0)	ND (0.35)
	H-3	1,100	1,100
August 20th, 2020 *Discharged on August 25th	Cs-134	ND (0.69)	ND (0.57)
	Cs-137	ND (0.65)	ND (0.61)
	Gross β	ND (2.0)	ND (0.38)
	H-3	1,000	1,100
August 19th, 2020 *Discharged on August 24th	Cs-134	ND (0.78)	ND (0.69)
	Cs-137	ND (0.69)	ND (0.58)
	Gross β	ND (1.7)	ND (0.38)
	H-3	980	1,000

August 18th, 2020 *Discharged on August 23rd	Cs-134	ND (0.50)	ND (0.59)
	Cs-137	ND (0.80)	ND (0.63)
	Gross β	ND (1.9)	ND (0.37)
	H-3	1,100	1,100
August 17th, 2020 *Discharged on August 22nd	Cs-134	ND (0.68)	ND (0.69)
	Cs-137	ND (0.65)	ND (0.72)
	Gross β	ND (0.66)	ND (0.42)
	H-3	1,100	1,100
August 16th, 2020 *Discharged on August 21st	Cs-134	ND (0.45)	ND (0.57)
	Cs-137	ND (0.65)	ND (0.69)
	Gross β	ND (1.9)	0.42
	H-3	1,000	1,100
August 15th, 2020 *Discharged on August 20th	Cs-134	ND (0.80)	ND (0.75)
	Cs-137	ND (0.54)	ND (0.69)
	Gross β	ND (2.0)	ND (0.40)
	H-3	950	1,000
August 14th, 2020 *Discharged on August 19th	Cs-134	ND (0.73)	ND (0.55)
	Cs-137	ND (0.69)	ND (0.63)
	Gross β	ND (1.7)	ND (0.34)
	H-3	930	960
August 13th, 2020 *Discharged on August 18th	Cs-134	ND (0.63)	ND (0.67)
	Cs-137	ND (0.60)	ND (0.42)
	Gross β	ND (1.7)	ND (0.35)
	H-3	830	890
August 12th, 2020 *Discharged on August 17th	Cs-134	ND (0.59)	ND (0.74)
	Cs-137	ND (0.54)	ND (0.58)
	Gross β	ND (1.8)	ND (0.37)
	H-3	940	1,000
August 11th, 2020 *Discharged on August 16th	Cs-134	ND (0.76)	ND (0.61)
	Cs-137	ND (0.54)	ND (0.54)
	Gross β	ND (1.8)	ND (0.38)
	H-3	1,000	1,100
August 10th, 2020 *Discharged on August 15th	Cs-134	ND (0.84)	ND (0.67)
	Cs-137	ND (0.54)	ND (0.63)
	Gross β	ND (1.6)	ND (0.37)
	H-3	960	1,000
August 9th, 2020 *Discharged on August 14th	Cs-134	ND (0.76)	ND (0.58)
	Cs-137	ND (0.47)	ND (0.72)
	Gross β	ND (1.9)	ND (0.36)
	H-3	1,000	1,100

August 8th, 2020 *Discharged on August 13th	Cs-134	ND (0.79)	ND (0.76)
	Cs-137	ND (0.47)	ND (0.85)
	Gross β	ND (1.8)	ND (0.39)
	H-3	1,100	1,200
August 7th, 2020 *Discharged on August 12th	Cs-134	ND (0.55)	ND (0.84)
	Cs-137	ND (0.60)	ND (0.62)
	Gross β	ND (0.68)	ND (0.37)
	H-3	1,200	1,300
August 6th, 2020 *Discharged on August 11th	Cs-134	ND (0.64)	ND (0.81)
	Cs-137	ND (0.65)	ND (0.77)
	Gross β	ND (1.8)	0.46
	H-3	1,100	1,100
August 5th, 2020 *Discharged on August 10th	Cs-134	ND (0.53)	ND (0.61)
	Cs-137	ND (0.54)	ND (0.69)
	Gross β	ND (1.9)	ND (0.37)
	H-3	970	1,000
August 4th, 2020 *Discharged on August 9th	Cs-134	ND (0.62)	ND (0.72)
	Cs-137	ND (0.73)	ND (0.51)
	Gross β	ND (1.8)	ND (0.35)
	H-3	910	980
August 3rd, 2020 *Discharged on August 8th	Cs-134	ND (0.63)	ND (0.70)
	Cs-137	ND (0.65)	ND (0.58)
	Gross β	ND (2.0)	0.51
	H-3	900	950
August 2nd, 2020 *Discharged on August 7th	Cs-134	ND (0.74)	ND (0.61)
	Cs-137	ND (0.69)	ND (0.51)
	Gross β	ND (2.0)	ND (0.40)
	H-3	930	980
August 1st, 2020 *Discharged on August 6th	Cs-134	ND (0.65)	ND (0.50)
	Cs-137	ND (0.54)	ND (0.51)
	Gross β	ND (0.64)	ND (0.35)
	H-3	1,000	1,100
July 31st, 2020 *Discharged on August 5th	Cs-134	ND (0.69)	ND (0.65)
	Cs-137	ND (0.80)	ND (0.66)
	Gross β	ND (1.6)	ND (0.37)
	H-3	1,100	1,100
July 30th, 2020 *Discharged on August 4th	Cs-134	ND (0.66)	ND (0.61)
	Cs-137	ND (0.65)	ND (0.51)
	Gross β	ND (1.8)	ND (0.35)
	H-3	1,000	1,100

July 29th, 2020 *Discharged on August 3rd	Cs-134	ND (0.63)	ND (0.69)
	Cs-137	ND (0.69)	ND (0.54)
	Gross β	ND (0.70)	ND (0.42)
	H-3	1,100	1,100
July 28th, 2020 *Discharged on August 2nd	Cs-134	ND (0.68)	ND (0.65)
	Cs-137	ND (0.69)	ND (0.61)
	Gross β	ND (1.9)	ND (0.39)
	H-3	1,000	1,100
July 27th, 2020 *Discharged on August 1st	Cs-134	ND (0.53)	ND (0.70)
	Cs-137	ND (0.54)	ND (0.69)
	Gross β	ND (1.9)	0.34
	H-3	980	1,100

* * 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

Appendix 3

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
July 1st,2020	Cs-134	ND (0.0028)	ND (0.0046)	ND (0.0072)
	Cs-137	0.0072	0.010	0.0077
	Gross α	ND (0.53)	ND (3.6)	ND (2.3)
	Gross β	ND (0.48)	ND (0.59)	ND (0.58)
	H-3	1,100	980	1,100
	Sr-90	0.0026	ND (0.0020)	ND (0.0058)

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

Appendix 4

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)
June 11th, 2020 *Sampled before discharge of purified groundwater.	Cs-134	ND (0.69)
	Cs-137	ND (0.56)
	Gross β	13
	H-3	1.7

(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.

Appendix 5

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
August 19th, 2020 *Discharged on August 27th	Cs-134	ND (0.67)	ND (0.53)
	Cs-137	ND (0.60)	ND (0.53)
	Gross β	ND (0.57)	ND (0.67)
	H-3	110	120
August 12th, 2020 *Discharged on August 20th	Cs-134	ND (0.73)	ND (0.69)
	Cs-137	ND (0.65)	ND (0.51)
	Gross β	ND (0.64)	ND (0.37)
	H-3	110	110
August 5th, 2020 *Discharged on August 13th	Cs-134	ND (0.79)	ND (0.67)
	Cs-137	ND (0.54)	ND (0.63)
	Gross β	ND (0.66)	ND (0.32)
	H-3	120	120
July 29th, 2020 *Discharged on August 6th	Cs-134	ND (0.73)	ND (0.32)
	Cs-137	ND (0.60)	ND (0.49)
	Gross β	ND (0.67)	ND (0.47)
	H-3	120	120

- * 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.

Appendix 6

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
July 1st, 2020	Cs-134	ND (0.0030)	ND (0.0050)	ND (0.0066)
	Cs-137	ND (0.0020)	ND (0.0038)	ND (0.0045)
	Gross α	ND (0.67)	ND (3.2)	ND (2.3)
	Gross β	ND (0.48)	ND (0.67)	ND (0.58)
	H-3	130	110	120
	Sr-90	ND (0.0012)	ND (0.0017)	ND (0.0058)

* 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)
June 11th, 2020	Cs-134	ND (0.67)
	Cs-137	ND (0.64)
	Gross β	10
	H-3	ND (1.6)

(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.