

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (1/3) Underground Water Obtained at Bank Protection

				r										1	Unit. By/	L (exclude
		Underground water observation hole No.0-1	Underground water observation hole No.0-1-2	Underground water observation hole No.0-2	Underground water observation hole No.0-3-1	Underground water observation hole No.0-3-2	Underground water observation hole No.0-4	Underground water observation hole No.1	Underground water observation hole No.1-6	Underground water observation hole No.1-8	Underground water observation hole No.1-9	Underground water observation hole No.1-11	Underground water observation hole No.1-12	Underground water observation hole No.1-14	Underground water observation hole No.1-16	Underg water obs hole No
	Date of sampling		/ /	/ /		/	/	/	/	/	/	/	/		/ /	
	Time of sampling	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
	Chloride (unit: ppm)					/				/		/				
C	s-134 (Approx. 2 years)			/		/	/			/	/	/				
Cs	s-137 (Approx.30 years)			/	/	/	/			/	/	/				
						/	/			/		/				/
The						/	/			/		/				
other y		/				/	/			/		/				
						/				/		/				
	Gross β				/	/		/	/	/	/	/				/
ŀ	H-3 (Approx. 12 years)	1/	1/	1/	1/	/	/	/	/	/	1/	/	1/	1/	1/	/
Sr	r-90 (Approx. 29 years)		/	/	/	/	/	/	/	/	/	/	/	/	/	/
		Groundwater pumped up from the well point	Underground water observation	Underground water observation	Underground water observation	Underground water observation	Underground	Underground	Underground	Groundwater pumped up from	Underground	Underground	Underground	Underground	Underground]
		(between Unit 1 and 2)	hole No.2	hole No.2-2	hole No.2-3	hole No.2-5	water observation hole No.2-6	water observation hole No.2-7	water observation hole No.2-8	the well point (between Unit 2 and 3)	water observation hole No.3	water observation hole No.3-2	water observation hole No.3-3			
	Date of sampling						hole No.2-6			(between Unit 2				water observation	water observation	7
	Date of sampling Time of sampling						hole No.2-6	hole No.2-7		(between Unit 2				water observation	water observation	
							hole No.2-6	hole No.2-7 Jul 30, 2014		(between Unit 2				water observation	water observation	-
	Time of sampling						hole No.2-6	hole No.2-7 Jul 30, 2014 10:12 AM		(between Unit 2				water observation	water observation	-
C	Time of sampling Chloride (unit: ppm)						hole No.2-6	hole No.2-7 Jul 30, 2014 10:12 AM 800		(between Unit 2				water observation	water observation	-
C	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)						hole No.2-6	hole No.2-7 Jul 30, 2014 10:12 AM 800 0.61		(between Unit 2				water observation	water observation	-
C	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)						hole No.2-6	hole No.2-7 Jul 30, 2014 10:12 AM 800 0.61		(between Unit 2				water observation	water observation	-
C: Cs	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)						hole No.2-6	hole No.2-7 Jul 30, 2014 10:12 AM 800 0.61		(between Unit 2				water observation	water observation	
C: Cs The	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)						hole No.2-6	hole No.2-7 Jul 30, 2014 10:12 AM 800 0.61		(between Unit 2				water observation	water observation	
C: Cs The	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)						water observation hole No.2-6	hole No.2-7 Jul 30, 2014 10:12 AM 800 0.61		(between Unit 2				water observation	water observation	
Cs Cs The other γ	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years) s-137 (Approx.30 years)						water observation hole No.2-6	hole No.2-7 Jul 30, 2014 10:12 AM 800 0.61 1.6		(between Unit 2				water observation	water observation	

* Data announced this time is provided in a thick-frame. The other data was announced on June 31.

* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

* "-" indicates that the measurement was out of range.

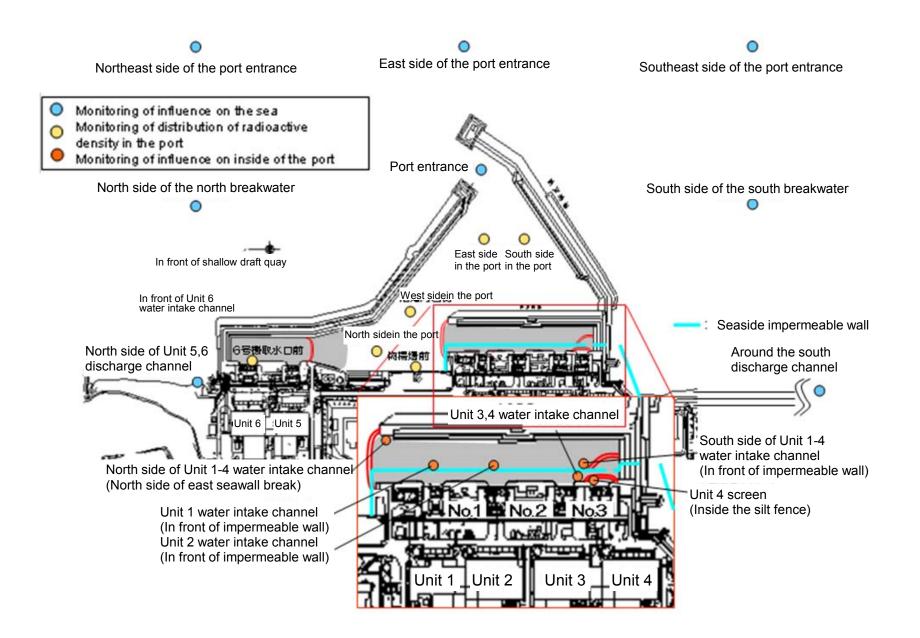
Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (2/3) Underground Water Obtained at Bank Protection

wa		Underground water observation	Underground	Underground	Underground	Underground	Underground	Underground	Linde an an and	Line de serve con d	I have been service and	Lin de serve un d	I be also as a second		
Date of sampling	hole No.0-1	hole No.0-1-2	water observation hole No.0-2	water observation hole No.0-3-1	water observation hole No.0-3-2		water observation hole No.1	Underground water observation hole No.1-6	Underground water observation hole No.1-8	Underground water observation hole No.1-9	Underground water observation hole No.1-11	Underground water observation hole No.1-12	Underground water observation hole No.1-14	Underground water observation hole No.1-16	Underground water observation hole No.1-17
	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
Time of sampling	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Chloride (unit: ppm)	/	/		/	/	/	/	/	/	/	/	/	/	/	/
Cs-134 (Approx. 2 years)	/	/		/	/	/	/	/	/	/	/			/	/
Cs-137 (Approx.30 years)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	/	/	/	/		/	/	/	/	/	/	/		/	/
The	/	/		/		/	/	/	/	/	/	/		/	/
other y	/	/		/	/	/	/	/	/	/	/	/		/	/
	/	/	/	/	/	/	/	/	/	/	/			/	/
Gross β	/	/	/	/	/	/	/	/	/	/	/	/		/	/
H-3 (Approx. 12 years)		/	/	/	/	/	/	/	/	/	/	/	1/	/	/
Sr-90 (Approx. 29 years)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	!					r	, ,			r	1	1		Y	1
pu t	Groundwater umped up from the well point between Unit 1 and 2)	Underground water observation hole No.2	Underground water observation hole No.2-2	Underground water observation hole No.2-3	Underground water observation hole No.2-5	Underground water observation hole No.2-6	Underground water observation hole No.2-7	Underground water observation hole No.2-8	Groundwater pumped up from the well point (between Unit 2 and 3)	Underground water observation hole No.3	Underground water observation hole No.3-2	Underground water observation hole No.3-3	Underground water observation hole No.3-4	Underground water observation hole No.3-5	
Date of sampling	/	/	/	/	/	/	Aug 1, 2014		/	/	/	/	1 /	/	
Time of sampling	/	/	/	/	/	/	9:28 AM	/	/	/	/	/	/	/	
Chloride (unit: ppm)	/	/	/	/	/	/	900	/	/	/	/		/	/	
Cs-134 (Approx. 2 years)	/	/	/	/	/	/	0.53	/	/	/	/		/	/	
Cs-137 (Approx.30 years)	/	/	/	/	/	/	1.5	/	/	/	/	/	/	/	
	/	/	/	/	/	/		/	/	/	/	/	/	/	
The	/	/	/	/	/	/		/	/	/	/	/	/	/	
other y		/	/	/	/	/			/	/					
	/	/	/	/	/	/				/					
Gross β	/		/	/	/	/	950	/			/		/	/	
H-3 (Approx. 12 years)	Inder analysis	/	/	/	/	/	Under analysis	/	/	/	/	/	/	/	
		/	1	/	/	1/		1/	/	1/	1/	1/	1/	1/	1

* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

* "-" indicates that the measurement was out of range.

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Seawater)



Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (3/3) Seawater

	1F, North side of Unit 5,6 discharge channel	1F, In front of Unit 6 water intake channel	1F, In front of shallow draft quay	1F, North side of Unit 1-4 water intake channel (north side of East Seawall Break)	TE, IN front of		1F, Between the water intake channel of Unit 3 and Unit 4	1F, Unit 4 Screen (Inside the Silt Fence)	1F, South side of Unit 1-4 water intake channel (In front of impermeable wall)	1F, Around the south discharge channel	Specified	tor drinking- water
Date of Sampling	/	/	/		/	/	/	/	/	/		
Time of sampling												
Cs-134(Approx. 2 years)											60	10
Cs-137(Approx.30 years)											90	10
Gross β												
H-3 (Approx. 12 years)											60,000	10,000
Sr-90(Approx. 29 years)				\overline{V}		V			V		30	10

Unit: Bg/L

Unit: Bg/L

												JIIII. DY/L
	1F, Port entrance	1F, East side in the port	1F, West side in the port	1F, North side in the port	1F, South side in the port	North side of the north breakwater	Northeast side of the port entrance	East side of the port entrance	Southeast side of the port entrance	South side of the south breakwater	Density Limit Specified by the Reactor Regulation	WHO Guidelines for drinking- water quality
Date of Sampling	/	/	/	/	/	Jul 31, 2014	Jul 31, 2014	Jul 31, 2014	Jul 31, 2014	Jul 31, 2014		
Time of sampling					/	9:38 AM	9:43 AM	9:48 AM	9:54 AM	9:58 AM		
Cs-134(Approx. 2 years)					/	ND(0.65)	ND(0.63)	ND(0.57)	ND(0.82)	ND(0.63)	60	10
Cs-137(Approx.30 years)	/					ND(0.52)	ND(0.53)	ND(0.62)	ND(0.62)	ND(0.71)	90	10
Gross β						ND(17)	ND(17)	ND(17)	ND(17)	ND(17)		
H-3 (Approx. 12 years)						Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	60,000	10,000
Sr-90 (Approx. 29 years)			V			-	-	-	-	-	30	10

* "ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

* "-" indicates that the measurement was out of range.

* Density Limit Specified by the Rule for the Installation, Operation, etc. of Commercial Nuclear Power Reactors (the density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2 [the amount is converted from Bq/cm³ to Bq/L]).

<Reference> The Highest Dose Until the Previous Measurement (Groundwater Obtained at Bank Protection)

		observa	idwater ition hole .0-1	observa	dwater tion hole)-1-1	Groun observat No.0	ion hole	Groun observa No	tion hole	observa	idwater ition hole 0-3-1	Groun observa No.0	tion hole	observa	dwater tion hole .0-4	observa	ndwater ation hole o.1	observa	dwater tion hole .1-1	observa	dwater tion hole .1-2*	Groun observat No.		observa	dwater tion hole 1-4 [*]	Groun observat No.	tion hole	observa	ndwater ation hol p.1-6
C	Cs-134 (Approx. 2 years)	29	<5/25>	ND		0.61	<3/2>	0.61	[10/13]	0.64	<4/6>	0.82	<1/14>	0.70	<6/29>	13	[8/29]	1.9	[7/8]	11,000	[7/9]	10	[9/2]	1.5	[7/8]	310	[8/5]	9,600	<7/28
C	Cs-137 (Approx.30 years)	78	<5/25>	ND		1.5	<3/2>	2.2	<1/12>	1.1	<4/6>	2.1	<1/14>	1.6	<6/29>	31	[8/29]	3.6	[7/8]	22,000	[7/9]	24	[9/2]	3.6	[7/8]	650	[8/5]	28,000	<7/28
	Ru-106 (Approx. 370 days)	ND		ND		ND		ND		ND		ND		ND		26	[5/24]	7.9	[7/8]	160	[8/15]	17	[7/22] [8/8]	3.1	[8/8]	ND		ND	
The	Mn-54 (Approx. 310 days)	ND		ND		ND		ND		ND		0.64	<2/20>	ND		ND		1.0	[7/5]	62	[7/5]	ND		ND		ND		320	<2/1: <2/1
other	Co-60 (Approx. 5 years)	ND		ND		ND		ND		ND		ND		ND		0.50	[7/19]	ND		3.1	[7/8]	ND		ND		ND		830	<2/2
	Sb-125 (Approx. 3 years)	ND		ND		ND		ND		ND		ND		ND		1.7	[7/11]	ND		250	[7/15]	1.4	[7/12] [8/26]	ND		12	[8/8]	34	<5/1
	Gross β	300	[8/29] <5/18>	21	[12/7]	24	<6/22>	87	[10/13]	ND		67 ^{*1}	[12/11]	44	<6/22>	1,900	[5/24]	4,400	[7/8]	9,300,000	[7/8]	160,000	[8/12] [8/15]	380	[8/19]	56,000	[8/5]	1,200,000) <7/2
	H-3 (Approx. 12 years)	45,000	[8/29]	18,000	[12/7]	74,000	[12/15] <1/19>	6,800	<2/16>	ND		76,000	<2/6>	56,000	<2/23>	500,000	[5/24] [6/7]	630,000	[7/8]	430,000	[9/16]	290,000	[7/12]	98,000	(7/11)	72,000	[8/15]	*2 110,000	
:	Sr-90(Approx. 29 years)	140	[8/8]	7.9	[12/7]	2.6	[11/10]	0.73	[9/2]	1.5	[11/20]	2.3	[12/6]	ND(0.83)	[10/27]	1,300	[8/22]	2,300	[6/28]	5,000,000	[7/5]	130,000	[8/8]	200	[7/8]	5,100	[8/22]	590,000	<2/1
																•													Unit: B
		observa	idwater ition hole .1-8	observa	dwater tion hole .1-9	Groun observat No.*	tion hole	Groun observa No.	tion hole	observa	idwater ition hole 1-12	Groun observa No.	tion hole	observa	dwater tion hole 1-14	observa	ndwater ation hole 1-15	observa	dwater tion hole 1-16	observa	dwater tion hole 1-17	Ground pumped the we (betwee and	up from Il point	observa	dwater tion hole 5.2	Ground observat No.:	tion hole	observa	ndwater ation ho 0.2-2
C	Cs-134 (Approx. 2 years)	47	[11/25]	170	[9/3]	-		1.1	<1/13>	74	[10/21]	37,000	<2/13>	88 *2	2 <2/27>	ND *1		30	<7/28>	1.4	<7/7>	110	[9/23]	0.88	<2/26>	0.66	[9/1]	15	<2/12
C	Cs-137 (Approx.30 years)	110	[11/25]	380	[9/3]	-		3.4	<4/28>	170	[10/21]	93,000	<2/13>	230 *2	² <2/27>	0.88	<7/10>	86	<7/28>	2.8	<4/28>	250	[9/23]	2.5	<2/26>	1.1	[8/29] [9/1]	38	<2/12
	Ru-106 (Approx. 370 days)	ND		ND		-		ND		5.4	[10/28]	ND		ND		ND		9.2	[10/28]	5.5	<4/21> <5/1>	25	[9/2]	ND		ND		ND	
The	Mn-54 (Approx. 310 days)	12	<2/3>	ND		-		ND		ND		ND		0.84	<7/28>	ND		1.3	<7/30>	ND		8.5	<4/28>	ND		ND		ND	
other	Co-60 (Approx. 5 years)	1.3	<2/3>	ND		-		ND		0.51	[10/24]	ND		0.44	<5/29>	ND		0.9	[11/7]	0.61	[11/25]	0.61	<6/9>	ND		ND		ND	
	Sb-125 (Approx. 3 years)	ND		ND		-		ND		61	[10/21]	ND		ND		ND		24	<6/16>	2.1	[11/25]	ND		ND		ND		ND	
	Gross β	59,000	<2/3>	2,100 ^{*2}	[11/17]	78 *2	<1/27>	2,300	[12/26]	1,100	<5/5>	260,000	<2/12> <2/13>	12,000	<7/28>	110	<7/10>	3,100,000	<1/20> <1/30> <2/3>	150,000	<7/28>	1,900,000	[9/23]	1,700	[7/8]	380	[7/29]	600	<4/1
	H-3 (Approx. 12 years)	33,000	<6/2>	860 ^{*2}	[11/14]	270,000 ^{*2}	<1/27>	85,000	[9/13]	440,000	[10/31]	88,000	<2/12>	23,000	<2/13>	74,000	<7/10>	43,000	[9/26]	32,000	<1/20>	460,000	[8/19]	1,000	<2/23>	440	[8/26]	660	<1/8
:	Sr-90(Approx. 29 years)	35,000	<2/17>	300	[10/3]	-		22	<1/9>	290	[10/21]	160,000	<2/12>	770	<3/10>	Under analysis		2,700,000	<2/13>	620	<3/10>	-		54	[5/31]	5.9	[7/25]	320	[12/2
																unuiyolo											Unit: Bq/L		
		observa	idwater ition hole .2-3	observa	dwater tion hole .2-5	Groun observat No.	ion hole	Groun observa No	tion hole	observa	idwater ition hole .2-8	Groun observa No	tion hole	pumped the we (betwee	dwater I up from ell point en Unit 2 d 3)	observa	ndwater ation hole o.3	observa	dwater tion hole .3-1	observa	dwater tion hole .3-2		dwater tion hole .3-3		dwater tion hole .3-4	Ground observat No.	ion hole		
C	Cs-134 (Approx. 2 years)	2.2	<2/26>	41	<5/7>	17	<3/11>	3.5	<2/23>	1.3	<7/20>	ND		2.0	<4/23>	3.5	[7/25]	1.2	[7/25] [8/8]	18	<7/9>	180	<7/2>	5.1	<7/23>	100	<7/30>		
C	Cs-137 (Approx.30 years)	5.5	<2/26>	110	<5/7>	50	<3/11>	9.0	<2/23>	3.4 *	2 <7/20>	0.58	<2/11>	4.7	<4/23>	5.9	[8/8]	2.6	[8/1]	54	<7/9>	500	<7/2>	14	<7/23>	310	<7/30>		
	Ru-106 (Approx. 370 days)	ND		ND		ND		ND		ND *	2	6.5	<2/11>	ND		ND		ND		ND		ND		ND		-			
The	Mn-54 (Approx. 310 days)	0.29	[12/6]	0.95	<6/4>	ND		ND		ND		ND		ND		ND		ND		ND		ND		0.54	[10/30]	-			
other	Co-60 (Approx. 5 years)	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		-			
	Sb-125 (Approx. 3 years)	ND		74	<5/7>	ND		ND		ND		ND		ND		1.6	<1/1>	ND		ND		ND		ND		-			
	Gross β	1,500	[12/6] <1/8>	150,000	<2/12>	3,200	[12/5]	1,300	<6/20>	*2 5,800	<7/23>	1,700	<2/7>	240,000	[12/12]	1,400	[7/11]	*2 180	[8/1]	3,000	<7/23>	8900	<7/2>	35	<7/23>	510	<7/16>		
	H-3 (Approx. 12 years)	1,700	[12/6]	7,900	<4/9>	1,200	[11/24] [11/27]	1,100	<1/19>	1,700 ^{*2}	<4/6><6/8>	13,000	<2/7> <2/11>	7,300	<7/27>	3,200	〔2012 12/12〕	460	[8/1]	3,700	<7/9>	8,000	<5/7>	170	[9/18]	170	<1/8>		
	Sr-90(Approx. 29 years)	1.200	[12/6]	Under		Under			[11/21]	3,900	<3/30>	1.200	<2/11>			8.3	[2012	4.4	[7/23]	Under		-		ND					

Since some samples are still under analysis, the highest dose of the Strontium-90 is among those previously announced.
*1 Analysis result of pumped water.
*2 The results are for a reference, since the water was highly turbid. (γ and Gross β were measured after filtration.)

* "ND" indicates that the measurement result is below the detection limit.

* Date of sampling is provided in parentheses. (): 2013, <>: 2014 * "*" is provided next to the name of the holes where the sampling could not be performed due to the chemical injection of ground improvement.

<Reference> The Highest Dose Until the Previous Measurement* (Seawater)

		side of Unit 5,6 ge channel	, ,	ont of Unit 6 ake channel	, .	t of shallow quay	water inta (north s	ide of Unit 1-4 ake channel ide of East all Break)	discharge front of in	ont of Unit 1 e channel (in npermeable vall)	intake char and Unit	en the water nnel of Unit 1 2 (surface yer)	intake char	en the water anel of Unit 1 (lower layer)	discharge front of in	ont of Unit 2 channel (in npermeable vall)	intake char	en the water nnel of Unit 2 Unit 3	1F, Betwee intake chan and		1F, Unit (Inside the	4 Screen	4 water int (In front of	side of Unit 1- ake channel impermeable rall)
Cs-134(Approx. 2 years)	1.8	[6/21]	2.8	[12/2]	5.3	[8/5]	32	[10/11]	12	<6/23>	87	[10/10]	93	[10/10]	7.9	<6/23>	52	[12/21]	37	<5/12>	62	[9/16]	15	<4/14> <5/19>
Cs-137(Approx.30 years)	4.5	<3/17>	5.8	[12/2]	8.6	[8/5]	73	[10/11]	33	<5/12>	200	[10/10]	200	[10/10]	27	<6/23>	110	[10/11] [12/21]	98	<5/12>	140	[9/16]	45	<5/19>
Gross ß	17	<1/6>	46	[8/19]	40	[7/3]	320	[8/12]	140	<5/5> <7/14>	1,900	<5/20>	1,500	<6/10>	140	<6/23>	1,000	<6/2>	660	<6/9>	610	<6/23>	380	<3/10>
H-3 (Approx. 12 years)	8.7	<5/12>	24	[8/19]	340	[6/26]	510	[9/2]	260	<7/14>	4,200	<5/27>	3,900	<6/10>	300	<6/23>	2,600	<6/2>	2,500	<6/23>	2,200	<7/21>	780	<7/21>
Sr-90 (Approx. 29 years)	4.7	[6/26]	Ι		7.2	[6/26]	220	[8/19]	-		480	[8/22]	290	[10/20]	-		340	[10/14]	190	[9/23]	140	[6/21]	-	

		d the south e channel	1F, Por	rt entrance	1F, East si	de in the port	1F, West s	ide in the port	1F, North s	ide in the port	1F, South s	side in the port		of the north kwater		side of the ntrance		of the south water	Southeast north bro	side of the eakwater		of the south kwater
Cs-134(Approx. 2 years)	1.8	<6/9>	3.3	[12/24]	3.3	[10/17]	4.4	[12/24]	5.0	[12/2]	3.5	[10/17]	ND		ND		ND		ND		ND	
Cs-137(Approx.30 years)	4.9	<6/9>	7.3	[10/11]	9.0	[10/17]	10	[12/24]	8.4	[12/2]	7.8	[10/17]	ND		ND		1.6	[10/18]	ND		ND	
Gross β	16	<6/9>	69	[8/19]	74	[8/19]	60	[7/4]	69	[8/19]	79	[8/19]	ND		ND		ND		ND		ND	
H-3 (Approx. 12 years)	5.6	<5/19>	68	[8/19]	67	[8/19]	59	[8/19]	52	[8/19]	60	[8/19]	4.7	[8/14]	1.7	<4/23>	6.4	[10/8]	1.8	<5/29>	2.8	<4/23>
Sr-90 (Approx. 29 years)	0.29	[6/26]	49	[8/19]	-		-		-		-		-		-		-		-		-	

* The highest result announced in "Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection" or the other handouts is provided.

As for "1F, North side of Unit 1-4 water intake channel", the data is obtained since January 14, 2013. For the other locations, the data is obtained since June 14.

• Since some samples are still under analysis, the highest dose of the Strontium-90 is among those previously announced.

* "ND" indicates that the measurement result is below the detection limit.

* Date of sampling is provided in parentheses. (): 2013, < >: 2014

* "-" indicates that the measurement was out of range.

[Reference] Standard values				Unit: Bq/L
	Cs-134	Cs-137	H-3	Sr-90
Density Limit Specified by the Rule for the Installation, Operation, etc. of Commercial Nuclear Power Reactors (the density limit in the water outside the surrounding monitored areas is provided in section 6 of Appendix 2)	60	90	60,000	30
WHO Guidelines for drinking-water quality	10	10	10,000	10

Unit: Bq/L

Unit: Bq/L