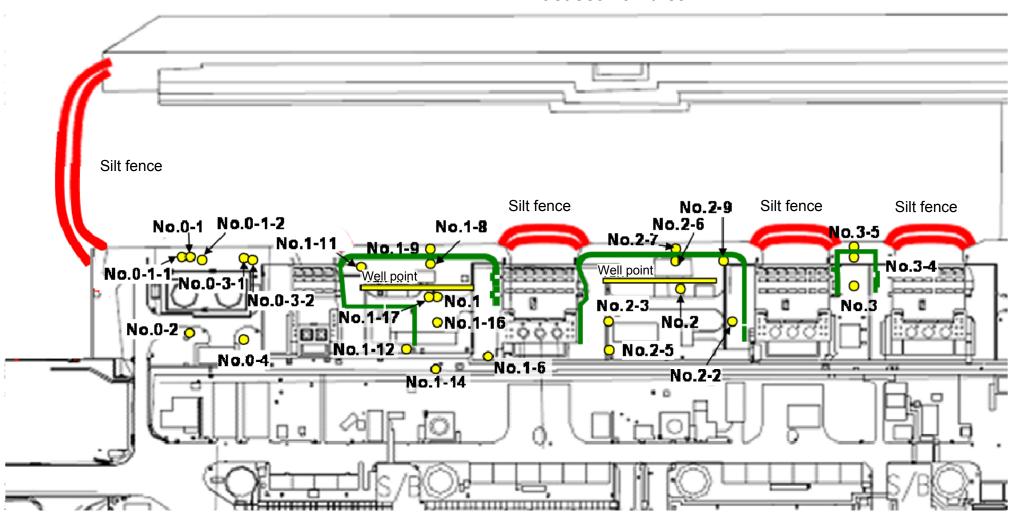
Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)

Sampling locations of underground water obtained at bank

East seawall break



: Location where ground improvement construction was completed, or being implemented (as of January 31, 2014)

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (1/2) Underground Water Obtained at Bank Protection

Unit: Bq/L (exclude chloride)

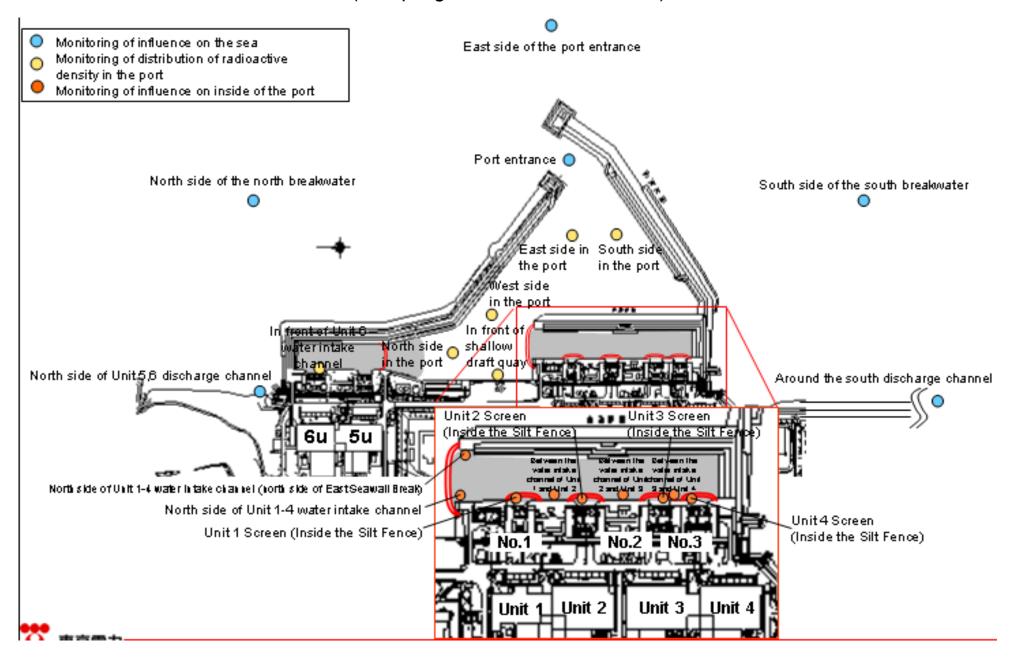
		Underground water observation hole No.0-1	Underground water observation hole No.0-1-2	Underground water observation hole No.0-2	Underground water observation hole No.0-3-1	Underground water observation hole No.0-3-2	Underground water observation hole No.0-4	Underground water observation hole No.1	Underground 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
	Date of sampling	/	/	/	/	/	//	/	/	/	Feb 11, 2014	/	/	//	110.0 110.1 10
	Time of sampling	/	/	/	/	/	/	/	/		7:20 AM		/	/	/
	Chloride (unit: ppm)										280				
С	s-134 (Approx. 2 years)										12				
С	s-137 (Approx.30 years)										35				
	Ru-106 (Approx. 370 days)										ND				
The															
other y															
	Gross β										160				
	H-3 (Approx. 12 years)										Under analysis				
S	r-90 (Approx. 29 years)	/	/	V	/	/	/	/	/	/	-	/	/	/	/
		Underground water observation hole No.1-17	Groundwater pumped 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.2-9*	Groundwater pumped up from the well point (between Unit 2 and 3)	Underground water observation hole No.3*	Underground water observation hole No.3-4	Underground water observation hole No.3-5	
	Date of sampling	water observation	pumped up from the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation	water observation	pumped up from the well point (between Unit 2	water observation	water observation	water observation	
	Date of sampling Time of sampling	water observation	pumped up from the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation hole No.2-6	water observation	water observation hole No.2-9*	pumped up from the well point (between Unit 2	water observation	water observation	water observation	
		water observation	pumped up from the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation hole No.2-6 Feb 11, 2014	water observation	water observation hole No.2-9* Feb 11, 2014	pumped up from the well point (between Unit 2	water observation	water observation	water observation	
C	Time of sampling	water observation	pumped up from the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation hole No.2-6 Feb 11, 2014 11:36 AM	water observation	water observation hole No.2-9* Feb 11, 2014 12:44 PM	pumped up from the well point (between Unit 2	water observation	water observation	water observation	
	Time of sampling Chloride (unit: ppm)	water observation	pumped up from the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation hole No.2-6 Feb 11, 2014 11:36 AM	water observation	water observation hole No.2-9* Feb 11, 2014 12:44 PM -	pumped up from the well point (between Unit 2	water observation	water observation	water observation	
	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)	water observation	pumped up from the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation hole No.2-6 Feb 11, 2014 11:36 AM - ND(0.37)	water observation	water observation hole No.2-9* Feb 11, 2014 12:44 PM - ND(0.46)	pumped up from the well point (between Unit 2	water observation	water observation	water observation	
C:	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years) s-137 (Approx.30 years)	water observation	pumped up from the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation hole No.2-6 Feb 11, 2014 11:36 AM - ND(0.37) ND(0.54)	water observation	water observation hole No.2-9* Feb 11, 2014 12:44 PM - ND(0.46) 0.58	pumped up from the well point (between Unit 2	water observation	water observation	water observation	
C	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years) s-137 (Approx.30 years)	water observation	pumped up from the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation hole No.2-6 Feb 11, 2014 11:36 AM - ND(0.37) ND(0.54)	water observation	water observation hole No.2-9* Feb 11, 2014 12:44 PM - ND(0.46) 0.58	pumped up from the well point (between Unit 2	water observation	water observation	water observation	
C:	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years) s-137 (Approx.30 years)	water observation	pumped up from the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation hole No.2-6 Feb 11, 2014 11:36 AM - ND(0.37) ND(0.54)	water observation	water observation hole No.2-9* Feb 11, 2014 12:44 PM - ND(0.46) 0.58	pumped up from the well point (between Unit 2	water observation	water observation	water observation	
C:	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years) s-137 (Approx.30 years)	water observation	pumped up from the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation hole No.2-6 Feb 11, 2014 11:36 AM - ND(0.37) ND(0.54)	water observation	water observation hole No.2-9* Feb 11, 2014 12:44 PM - ND(0.46) 0.58	pumped up from the well point (between Unit 2	water observation	water observation	water observation	
The other y	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years) s-137 (Approx.30 years) Ru-106 (Approx. 370 days)	water observation	pumped up from the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation hole No.2-6 Feb 11, 2014 11:36 AM - ND(0.37) ND(0.54) ND	water observation	water observation hole No.2-9* Feb 11, 2014 12:44 PM - ND(0.46) 0.58 6.5	pumped up from the well point (between Unit 2	water observation	water observation	water observation	

^{* &}quot;ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

^{* &}quot;-" indicates that the measurement was out of range.

^{*} The results obtained on in the observation hole No.2-9 are for a reference, since the water was highly turbid. (γ and Gross β will be measured after filtration. If filtration takes a long time, γ will not be measured.)

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 (2/2) Seawater

Unit: Bq/L

	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	1F, North side of Unit 1-4 water intake channel (north side of East Seawall Break)	1F, Unit 1 Screen (Inside the Silt Fence)	water intake channel of Unit 1	1F, Between the water intake channel of Unit 1 and Unit 2 (lower layer)	1F, Unit 2 Screen	1F, Between the water intake channel of Unit 2 and Unit 3	Screen	1F, Between the water intake channel of Unit 3 and Unit 4	Specified by the	WHO Guideline s for drinking- water quality
Date of Sampling			/	Feb 11, 2014			Feb 11, 2014	Feb 11, 2014	/		/			
Time of sampling				7:10 AM			7:14 AM	7:14 AM						
Cs-134(Approx. 2 years)				19			21	21					60	10
Cs-137(Approx.30 years)				50			52	59					90	10
Gross β				240			260	230						
H-3 (Approx. 12 years)				Under analysis			Under analysis	Under analysis					60,000	10,000
Sr-90 (Approx. 29 years)			/	-			-	-	/	/		/	30	10

													L	Jnit: Bq/L
	1F, Unit 4 Screen (Inside the Silt Fence)	1F, Around the south discharge channel		1F, East side in the port	1F, West side in the port	1F, North side in the port		North side of the north breakwater		East side of the port entrance	Southeast side of the port entrance	South side of the south breakwater	Density Limit Specified by the Reactor Regulatio n *	WHO Guideline s for drinking- water quality
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)	/	/	/	/	/	/	/	/	/	/	/	/	30	10

^{* &}quot;ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

^{* &}quot;-" 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/cm to Bq/L]).

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

																											Unit: Bq/L
		observa	dwater ition hole .0-1	observa	ndwater ation hole 0-1-1	observa	ndwater ation hole 0-1-2	observa	ndwater ation hole 5.0-2	observa	ndwater ation hole 0-3-1	observa	dwater ition hole 0-3-2	observa	dwater tion hole .0-4	Groun observa No	tion hole	Ground observat No.	ion hole	Ground observat No.	ion hole	Ground observat No.	ion hole	observa	dwater tion hole	Ground observati No.	tion hole
C	s-134 (Approx. 2 years)	7.6	[12/15]	ND		ND		0.61	[10/13]	0.44	[11/24]	0.82	<1/14>	ND		13	[8/29]	1.9	[7/8]	11,000	[7/9]	10	[9/2]	1.5	[7/8]	310	[8/5]
С	s-137 (Approx.30 years)	19 *3	<1/26>	0.58	[12/7]	0.51	[11/17]	2.2	<1/12>	0.86	[11/20]	2.1	<1/14>	1.4	<1/12>	31	[8/29]	3.6	[7/8]	22,000	[7/9]	24	[9/2]	3.6	[7/8]	650	[8/5]
	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	
The	Mn-54 (Approx. 310 days)	ND		ND		ND		ND		ND		0.62	<2/3>	ND		ND		1.0	[7/5]	62	[7/5]	ND		ND		ND	
other y	Co-60 (Approx. 5 years)	ND		ND		ND		ND		ND		ND		ND		0.50	[7/19]	ND		3.1	[7/8]	ND		ND		ND	
	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]
	Gross β	300	[8/22]	21	[12/7]	21	[11/10]	87	[10/13]	ND		67 ^{*2}	[12/11]	29	[12/29]	1,900	[5/24]	4,400	[7/8]	900,000	(7/5) (7/9)	160,000	(8/12) (8/15)	380	[8/19]	56,000	[8/5]
	H-3 (Approx. 12 years)	45,000	[8/29]	18,000	[12/7]	74,000	[12/15] <1/19>	6,400	<1/26>	ND		76,000	<2/6>	48,000	<1/26> <2/3>	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]
,	Gr-90(Approx. 29 years)	140	[8/8]	Under analysis		Under analysis		0.73	[9/2]	Under analysis		Under analysis		Under analysis		1,300	[8/22]	2,300	[6/28]	5,000,000	[7/5]	130,000	[8/8]	200	[7/8]	5,100	[8/22]

		Ground observati No.1	on hole	observa	ndwater ition hole .1-8		dwater tion hole 1-9	Ground observat No.1	ion hole	observa	dwater tion hole 1-11	observa	dwater tion hole 1-12	Groun observa No.		observa	idwater ition hole 1-16	observa	dwater tion hole 1-17	Ground pumped the wel (between	up from I point n Unit 1
С	s-134 (Approx. 2 years)	-		47	[11/25]	170	[9/3]	-		1.1	<1/13>	74	[10/21]	1.2 *2	[11/14]	3.1 *2	[12/13]	1.2	[12/5]	110	[9/23]
C	s-137 (Approx.30 years)	-		110	[11/25]	380	[9/3]	-		2.8	<1/13>	170	[10/21]	2.3	[11/21]	3.4	[10/10]	0.66	[12/12]	250	[9/23]
	Ru-106 (Approx. 370 days)	-		ND		ND		-		ND		5.4	[10/28]	ND		9.2	[10/28]	4.1	[12/12]	25	[9/2]
The	Mn-54 (Approx. 310 days)	-		12	<2/3>	ND		-		ND		ND		ND		ND		ND		1.1	<2/10>
other y	Co-60 (Approx. 5 years)	-		1.3	<2/3>	ND		-		ND		0.51	[10/24]	ND		0.9	[11/7]	0.61	[11/25]	ND	
	Sb-125 (Approx. 3 years)	-		ND		ND		-		ND		61	[10/21]	ND		11	[12/5]	2.1	[11/25]	ND	
	Gross β	560,000	<2/6>	59,000	<2/3>	2,100*4	[11/17]	78 ^{*4}	<1/27>	2,300	[12/26]	730	[10/21]	440	<1/30>	3,100,000	<1/20> <1/30> <2/3>	130	[12/2] [12/23]	700,000	[9/23]
	H-3 (Approx. 12 years)	110,000	<2/6>	12,000	<1/6> <2/3>	860 *4	[11/14]	270,000	<1/27>	85,000	[9/13]	440,000	[10/31]	19,000	<2/3> <2/6>	43,000	[9/26]	32,000	<1/20>	460,000	[8/19]
S	r-90(Approx. 29 years)	-		1,300	[9/16]	170	[9/3]	-		17	[9/13]	Under analysis		Under analysis		Under analysis		Under analysis		-	

																										Unit: Bq/L
		observa	dwater tion hole o.2	observa	ndwater ition hole .2-1	observa	dwater tion hole .2-2	observa	ndwater ation hole a.2-3	observa	dwater tion hole .2-5	observa	ndwater ation hole 0.2-6	observa	dwater tion hole .2-7	Groundwater observation hole No.2-9	pumper the w (betwe	ndwater d up from ell point en Unit 2 id 3)	observa	ndwater ation hole lo.3	observa	dwater ition hole .3-1	observa	ndwater ation hole 0.3-4	observa	idwater ition hole .3-5
С	s-134 (Approx. 2 years)	0.50	[7/9]	0.66	[9/1]	14	<2/2>	0.84	<1/5>	13	<1/8>	0.56	[10/30]	1.5	<1/12>	-	1.1	[12/12]	3.5	[7/25]	1.2	(7/25) (8/8)	1.9	<1/8>	64	<1/15>
С	s-137 (Approx.30 years)	1.2	(7/11) (8/1)	1.1	(8/29) (9/1)	34	<1/29>	2.6	<1/5>	30	<1/8>	0.71	<1/30>	3.6	<1/12>		2.4	[12/7]	5.9	[8/8]	2.6	[8/1]	4.3	[11/27]	170	<1/15>
	Ru-106 (Approx. 370 days)	ND		ND		ND		ND		ND		ND		ND		-	ND		ND		ND		ND		-	
The	Mn-54 (Approx. 310 days)	ND		ND		ND		0.29	[12/6]	0.94	<1/8>	ND		ND		-	ND		ND		ND		0.54	[10/30]	-	
other y	Co-60 (Approx. 5 years)	ND		ND		ND		ND		ND		ND		ND		1	ND		ND		ND		ND		1	
	Sb-125 (Approx. 3 years)	ND		ND		ND		ND		26 *1	[9/29]	ND		ND		-	ND		1.6	<1/1>	ND		ND		-	
	Gross β	1,700	[7/8]	380	[7/29]	540	<1/29>	1,500	[12/6]	46,000 *1	1 (9/29)	3,200	[12/5]	270	[12/20]	1,700*4 <2/7>	240,000	[12/12]	1,400	[7/11]	180	[8/1]	ND		69	<1/29>
	H-3 (Approx. 12 years)	870	[12/8]	440	[8/26]	660	<1/8>	1,700	[12/6]	6,300	[12/4]	1,200	[11/24] [11/27]	1,100	<1/17>	*4 13,000 <2/7>	5,100	[12/6]	3,200	[2012/12/ 12]	460	[8/1]	170	[9/18]	170	<1/8>
	r-90(Approx. 29 years)	54	[5/31]	5.9	[7/25]	Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		=	-		8.3	(2012/12/ 12)	4.4	[7/23]	ND		-	

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

1 The analysis result of No.2-5 obtained on September 29 is the reference value, since we could not sample groundwater by a regular procedure.

2 Analysis result of pumped water.

3 The results are for a reference, since the water was highly turbid. (γ and Gross β were measured after filtration.)

4 The results are for a reference, since the water was highly turbid. (γ and Gross β were measured after filtration. If filtration takes a long time, γ will not be analyzed.)

^{* &}quot;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)

Unit: Bq/L

		side of Unit 5,6 rge channel		ont of Unit 6 ake channel		nt of shallow t quay		de of Unit 1-4 ake channel	water inta (north si	ide of Unit 1-4 ake channel ide of East all Break)		t 1 Screen e Silt Fence)	intake cha	en the water nnel of Unit 1 surface layer	intake cha			t 2 Screen e Silt Fence)	intake char	en the water nnel of Unit 2 Unit 3		3 Screen e Silt Fence)	intake cha	een the water nnel of Unit 3 Unit 4
Cs-134(Approx. 2 years)	1.8	[6/21]	2.8	[12/2]	5.3	[8/5]	89	[10/10]	32	[10/11]	73	[10/10]	87	[10/10]	93	[10/10]	370	[10/9]	52	[12/21]	350	(7/15)	28	[9/16]
Cs-137(Approx.30 years)	3.3	[6/26]	5.8	[12/2]	8.6	[8/5]	190	[10/10]	73	[10/11]	170	[10/10]	200	[10/10]	200	[10/10]	830	[10/9]	110	[10/11] [12/21]	770	[7/15]	53	[12/16]
Gross β	17	<1/6>	46	(8/19)	40	[7/3]	1,400	[11/7]	320	(8/12)	740	[10/28]	1,200	[12/8]	450	[7/16]	1,700	[10/9]	480	[10/7]	1,000	(7/15)	390	[8/12]
H-3 (Approx. 12 years)	8.6	[6/26]	24	(8/19)	340	[6/26]	4,800	[11/7]	510	[9/2]	2,800	[10/28]	2,800	[12/8]	1,600	[9/1]	2,100	[10/28]	1,200	[10/7]	410	[9/2]	650	[8/12]
Sr-90 (Approx. 29 years)	5.8	*1 (6/26)	-		7.4	(6/26) ^{*1}	720	[9/22]	220	(8/19)	480	[10/14]	480	[8/22]	290	[10/20]	430	[10/14]	340	[10/14]	120	[9/23]	190	[9/23]

Unit: Bq/L

		4 Screen e Silt Fence)		nd the south ge channel	1F, Por	t entrance	1F, East si	ide in the port	1F, West s	ide in the port	1F, North s	ide in the port	1F, South s	ide in the por	North side of the north breakwater	Northeast side of the port entrance	East side of the south breakwater	Southeast side of the north breakwater	South side of the south breakwater
Cs-134(Approx. 2 years)	62	(9/16)	ND		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)	140	[9/16]	3.0	[7/15]	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	360	[10/7]	15	<1/13>	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)	400	(8/12) (10/7)	1.9	[11/25]	68	[8/19]	67	[8/19]	59	[8/19]	52	[8/19]	60	[8/19]	4.7 [8/14]	ND	6.4 [10/8]	ND	ND
Sr-90 (Approx. 29 years)	130	[9/23]	0.36	*1 (6/26)	49	[8/19]	-		-		-		1		-	-	-	-	-

^{*} 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.

[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

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

^{*1} Since reanalysis is ongoing, the figures are just for a reference.

^{* &}quot;ND" indicates that the measurement result is below the detection limit.

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

^{* &}quot;-" indicates that the measurement was out of range.