

or being implemented (as of April 18, 2014)

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

						-									Unit: Bq	L (exclude chlorid
		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	Underground water observation hole No.1-17
	Date of sampling	/	1	/ /	/			1	/	/	Aug 10, 2014			/ /	/ /	
	Time of sampling	/	/	/	/	/	/	/	/	/	7:18 AM	/	/	/	/	
	Chloride (unit: ppm)			/	/	/			/		33					/
Cs	-134 (Approx. 2 years)				/						ND(1.2)					/
Cs-	-137 (Approx.30 years)	/		/	/	/	<u> </u>		/	/	5.7					
				/	/	/		/	/	/		/	/		/	/
The					/	/		/	/	/		/	/			
other y					/	/			/				/			
ŀ																
	Gross ß									/	110		-/			/
н	-3 (Approx. 12 years)	/	/	/	/	/	/	/	/	/	ND(120)	1/	/	/	/	/
	90 (Approx. 29 years)	/	/	/	/	/	/	/	/	/	-	/	/	/	/	/
0.		/	/	/	/	/	/	/	/	/		/	/	/	/	/
		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.2-8	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	/	1	1 /	/		/	1	/	1	1 /	1	1	/ /	1 /	/
	Time of sampling	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
	Chloride (unit: ppm)			/	/				/		/					
Cs	-134 (Approx. 2 years)			/	/	/			/		/					
Cs-	-137 (Approx.30 years)			/	/	/			/	/	/		/			
				/	/	/			/							-
The					/				/							-
other y					/	/		/	/			/	/			
F		t /	t /	/		/	t /	t /		/	/	/	1 /	t /	t /	1
	Gross β	/	/	/				/		/	/	/		/	/	1
н	-3 (Approx. 12 years)	1/	/	/	/	/	/	/	/	/	/	/	1/	/	/	1
	90 (Approx. 29 years)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	1
		V	V	V	Y	V	V	V	V	V	V	V	V	V	V	1

* Data announced this time is provided in a thick-frame. The other data was announced on August 11.

* "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.

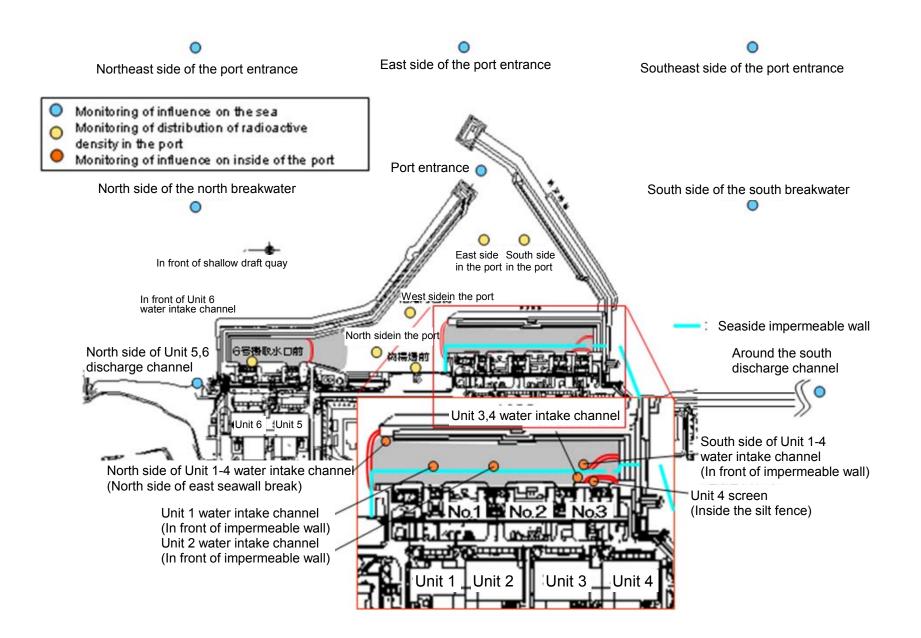
Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (2/3) Underground Water Obtained at Bank Protection

			•	•	•				•						Unit: Bq/	L (exclude chlo
		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	Undergrou water observ hole No.1-
	Date of sampling	/	/	/	/	/	/	/	/	/	Aug 12, 2014	/	/ /	1	/	
	Time of sampling		/	/	/	/	/	/	/	/	6:55 AM	/	/	/	/	
	Chloride (unit: ppm)	/	/	/	/	/		/	/		26		/		/	
C۶	s-134 (Approx. 2 years)	/	/	/	/	/		/	/		1.1				/	
C۶	-137 (Approx.30 years)	/	/	/	/	/	/	/	/		2.6				/	/
			/	/	/	/	/	/	/						/	/
The			/	/	/	/	/	/	/						/	/
other y			/	/	/	/	/	/	/						/	
ľ			/	/		/	/	/	/						/	
	Gross β			/		/		/	/		18				/	
ł	I-3 (Approx. 12 years)	1/	/	/	/	/	1	/	/	1/	Under analysis	1/	1/	1/	/	/
Sr	-90 (Approx. 29 years)	/	/	/	/	/	/	/	/	/	-	/	/	/	/	/
		1	l	ľ		r	<i>i</i>	V		¥		1	I	¥	¥	
		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.2-8	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 12, 2014	/	/	1	/ /	1 /	1 /	1	/	
	Time of sampling	/	/	/	/	/	9:28 AM	/	/	/	/	/	/	/	/	
	Chloride (unit: ppm)		/	/	/	/	-	/	/				/		/	
C۶	s-134 (Approx. 2 years)			/	/	/	ND(0.43)	/	/				/		/	
Cs	-137 (Approx.30 years)		/	/	/	/	ND(0.56)	/	/			/	/		/	
			/	/	/	/		/	/				/		/	
The			/	/	/	/		/	/						/	
other y			/	/	/	/		/	/						/	
		1 /	<u> </u>	i /	i /	/		/	/	/ /	/			/ /	/	1
		/		/	/	/			/						/	
	Gross β		-/	-/	-/	-/	2,100	/				/	/		/	
	Gross β I-3 (Approx. 12 years)			/	/	/	2,100 Under analysis	/	/	/	/	/	/	/	/	-

* "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)	Unit 1 discharge channel (in front	1F, In front of Unit 2 discharge channel (in front of impermeable wall)	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	WHO Guidelines 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)		/	/	\checkmark	/	/		/	\bigvee	/	30	10

Unit: Bg/L

Unit: Bg/L

												JNIT: Rd/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	Aug 12, 2014	Aug 12, 2014	Aug 12, 2014	Aug 12, 2014	Aug 12, 2014	/	/	/	/	/		
Time of sampling	8:40 AM	8:30 AM	8:50 AM	8:55 AM	8:35 AM							
Cs-134(Approx. 2 years)	ND(1.3)	ND(1.1)	ND(1.2)	ND(1.3)	ND(1.4)						60	10
Cs-137(Approx.30 years)	ND(1.1)	2.4	1.5	1.7	ND(1.2)						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)	Under analysis	-	-	-	-		/	/			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)

			idwater ition hole .0-1	observa	dwater tion hole)-1-1	Ground 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*		dwater tion hole 1-2 [*]	Groun observat No.		observa	dwater tion hole 1-4 [*]	Groun observat No.	tion hole	observa	ndwater ation ho 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]	12,000	<8/12
C	s-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]	34,000	<8/12
	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	<2/13 <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]	1,400,000) <8/12
	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	dwater tion hole .1-8	observa	dwater tion hole .1-9	Ground observat No.1	ion 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		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	s-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		1.1	<8/7>	ND		2.7	<8/12>	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>	21,000	<8/12>	110	<7/10>	3,100,000	<1/20> <1/30> <2/3>	280,000	<8/12>	1,900,000	[9/23]	1,700	[7/8]	380	[7/29]	600	<4/16
	H-3 (Approx. 12 years)	33,000	<6/2>	860 *2	[11/14]	*2 270,000	<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
																didiysis											Unit: Bq/L		
		observa	idwater ition hole .2-3	observa	dwater tion hole .2-5	Ground 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		dwater tion hole .3-2		dwater tion hole .3-3		dwater tion hole .3-4	Groun 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]	22	<8/6>	180	<7/2>	5.1	<7/23>	100	<7/30>		
C	s-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]	63	<8/6>	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		1,400	[7/11]	*2 180	[8/1]	3,000	<7/23> <8/6>	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	2 <4/6> <8/6>	13,000	<2/7> <2/11>	7,500	<7/30> <8/6>	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 rge channel	, ,	ont of Unit 6 ake channel	, .	t of shallow quay	water inta (north si	ide of Unit 1-4 ake channel ide of East ill 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	nt of Unit 2 channel (in npermeable rall)	intake char	een the water nnel of Unit 2 Unit 3	intake chan	en the water nel of Unit 3 Unit 4	1F, Unit (Inside the	4 Screen	4 water int (In front of i	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 β	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>	320	<8/4>	2,600	<6/2>	2,500	<6/23>	2,200	<7/21>	810	<8/4>
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	t entrance	1F, East s	ide 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 kwater		t side of the eakwater		of the south water
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> <8/4>	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