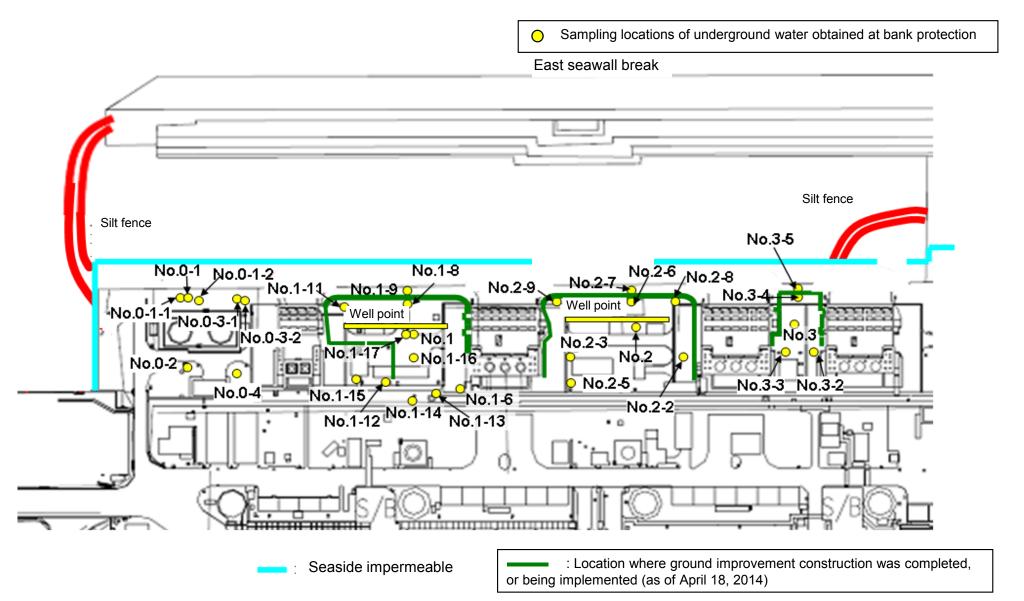
Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (Sampling Locations of Underground Water Obtained at Bank Protection)



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 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 (note)	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	/	/	/	/	/	/	November 03, 2014	November 03, 2014	November 10, 2014	November 02, 2014	November 10, 2014	November 03, 2014	November 03, 2014	November 10, 2014	November 03, 2014
	Time of sampling							9:39 AM	9:40 AM	9:52 AM	7:25 AM	9:18 AM	9:00 AM	9:05 AM	9:17 AM	10:24 AM
	Chloride (unit: ppm)							-	-	_	19	-	-	-	-	-
	Cs-134 (Approx. 2 years)							ND(0.45)	30,000	12	-	ND(0.43)	5.1	94	ND(1.5)	ND(1.0)
(Cs-137 (Approx.30 years)							ND(0.60)	92,000	35	-	1.1	14	270	4.2	ND(0.63)
	Mn-54 (Approx. 310 days)							ND	ND	ND	ND	ND	ND	ND	3.7	ND
The	Co-60 (Approx. 5 years)							ND	460	ND	ND	ND	ND	ND	ND	ND
other	Sb-125 (Approx. 3 years)							ND	ND	ND	ND	ND	ND	ND	8.3	ND
	Gross β							39	1,200,000	12,000	ND(19)	46	110	22,000	610,000	26,000
	H-3 (Approx. 12 years)							220,000	5,800	16,000	ND(110)	10,000	37,000	2,900	3,000	160,000
;	Gr-90 (Approx. 29 years)	/				/		23	920,000	11,000	2.1	21	34	17,000	570,000	21,000

		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.2-5 (note)	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(note)
	Date of sampling	/	1	/	1 /	/	/	/	/	1 /	/	/	/	/	
	Time of sampling														
	Chloride (unit: ppm)														
(Cs-134 (Approx. 2 years)														
С	Cs-137 (Approx.30 years)														
	Mn-54 (Approx. 310 days)														
The	Co-60 (Approx. 5 years)														
other y	Sb-125 (Approx. 3 years)														
	Gross β														
	H-3 (Approx. 12 years)														
S	6r-90 (Approx. 29 years)														

^{*} Data announced this time is provided in a thick-frame. The other data was announced on November 3,4,5,7,11 and 14, 2014

(Note) As for No. 1-9, 2-5, and 3-5, γ was not measured because they are samlpled by sampler. Gross β were measured after filtation for references.

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

^{* &}quot;-" 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 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 (note)	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	1	1	/				
	Time of sampling							/		/			/			
	Chloride (unit: ppm)															/
Cs	s-134 (Approx. 2 years)															
Cs	-137 (Approx.30 years)															
The																
ther y																
·	Gross β															
H	H-3 (Approx. 12 years)															
Sr	-90 (Approx. 29 years)	/	/	/		/	/		/	/		/	/	/	/	/
		Groundwater pumped up from the well point	Underground	Underground water observation	Underground	Underground	Underground	Underground	Underground	Groundwater pumped up from the well point	Underground	Underground	Underground	Underground water observation	Underground	

		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 (note		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(note)
	Date of sampling	/	December 1412, 2014	December 1412, 2014	December 1412, 2014		/ ,	December 1412, 2014	December 1412, 2014	December 1412, 2014	/	,	/	1	1 /
	Time of sampling	/	8:48 AM	10:08 AM	9:08 AM	/		9:26 AM	9:48 AM	10:00 AM	/	/			
	Chloride (unit: ppm)		-	_	_			660	-	-					
C	Cs-134 (Approx. 2 years)		0.38	2.7	ND(0.38)			ND(0.42)	ND(0.40)	ND(0.41)					
C	Cs-137 (Approx.30 years)		1.3	9.9	ND(0.58)			ND(0.56)	ND(0.56)	0.67					
The															
other y	,														
	Gross β		150	330	780			790	2,600	46,000					
	H-3 (Approx. 12 years)		680	370	820	/		750	880	3,500		/			
S	Gr-90 (Approx. 29 years)		-	_	-			-	-	-					

 $^{^{\}star}$ Data announced this time is provided in a thick-frame. The other data was announced on December 15, 2014.

(Note) As for No. 1-9, 2-5, and 3-5, γ was not measured because they are samlpled by sampler. Gross β were measured after filtation for references.

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

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

Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection (3/3) 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 (note)	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	1 /	/	1
	Time of sampling							/		/						
	Chloride (unit: ppm)															
C	Cs-134 (Approx. 2 years)															
С	Cs-137 (Approx.30 years)															
	Sb-125 (Approx. 3 years)															
The																
other y	,															
	Gross β															
	H-3 (Approx. 12 years)	1													1	
S	Gr-90 (Approx. 29 years)	/			/	/	/	/	/	/	/		/	/		/

		Groundw pumped up the well p (between) and 2	o from point Unit 1	Underground water observation hole No.2	Underground water observation hole No.2-2		Undergrou water observ hole No.2-5	ation	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(note)
	Date of sampling			December 17, 2014	December 17, 2014	December 17, 2014				December 17, 2014	December 17, 2014	December 17, 2014	December 17, 2014	December 17, 2014	December 17, 2014	December 17, 2014	December 17, 2014
	Time of sampling			9:45 AM	11:32 AM	10:15 AM		/	/	10:40 AM	11:05 AM	10:00 AM	9:00 AM	9:55 AM	10:20 AM	9:15 AM	8:30 AM
	Chloride (unit: ppm)			-	-	Ī		/		700	-	_	-	-	-	-	600
	Cs-134 (Approx. 2 years)			ND(0.35)	4.3	ND(0.36)	,	/		ND(0.38)	ND(0.33)	ND(0.44)	0.84	8.0	45	3.7	-
	Cs-137 (Approx.30 years)			0.71	9.2	0.62	/			0.94	ND(0.44)	0.55	2.7	32	150	11	-
	Sb-125 (Approx. 3 years)			ND	ND	ND	/			ND	ND	ND	1.2	ND	ND	ND	-
The							/										
othe	Υ						/										
							/										
	Gross β			120	340	760	/			800	3,000	38,000	ND(21)	2,500	2,800	ND(21)	25
	H-3 (Approx. 12 years)			Under analysis	Under analysis	Under analysis	/			Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis	Under analysis
	Sr-90 (Approx. 29 years)			-	-	-	/			_	-	-	-	-	-	-	_

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

(Note) As for No. 1-9, 2-5, and 3-5, γ was not measured because they are samlpled by sampler. Gross β were measured after filtation for references.

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

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

Init:	

Unit: Bq/L

		observ	ndwater ation hole 5.0-1	observa	ndwater ation hole 0-1-1	observa	idwater ition hole 0-1-2	observa	dwater tion hole .0-2	observa	ndwater ation hole .0-3-1	observa	ndwater ation hole 0-3-2	observa	dwater tion hole .0-4	Groun observa No			dwater tion hole 1-1	Groun observa No.		Ground observati No.1	ion hole	observa	dwater tion hole .1-4*	Groun observa No.	tion hole	Ground observati No.	on hole
C	Cs-134 (Approx. 2 years)	29	<5/25>	ND		0.61	⟨3/2⟩	0.61	[10/13]	0.64	<4/6>	1.3	<9/25>	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]	67,000	<10/17>
С	s-137 (Approx.30 years)	78	<5/25>	ND		1.5	⟨3/2⟩	2.2	<1/12>	1.1	<4/6>	5.1	<9/25>	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]	200,000	<10/16>
	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		700	<10/13>
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		3,600	<10/13>
	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	<5/19>
	Gross β	300	[8/29] <5/18>	21	[12/7]	24	<6/22>	87	[10/13]	ND		74	<10/9>	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]	7,800,000	<10/13>
	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]	110,000 *2	⟨2/6⟩
5	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]	1,100,000	<8/4> <10/2>

Groundwater pumped up from Groundwater Groundwater observation hole the well point observation hole observation hole observation hole No.1-8 No.1-9 No.1-10 No.1-11 No.1-12 No.1-13 No.1-14 No.1-15 No.1-16 No.1-17 (between Unit No.2 No.2-1 No.2-2 and 2) <10/18> Cs-134 (Approx. 2 years) 47 [11/25] 170 [9/3] 1.1 <1/13> 74 [10/21] 37.000 <2/13> 130 ND 30 <7/28> <7/7> 920 <11/13> 0.88 (2/26) 0.66 [9/1] 15 (2/12) 1.4 <12/11> [8/29] Cs-137 (Approx.30 years) 110 [11/25] 380 [9/3] 3.4 <4/28> 170 [10/21] 93,000 <2/13> 430 <12/11> 0.88 <7/10> 86 <7/28> 3.0 <9/29> 3,000 <11/13> 2.5 <2/26> 1.1 38 <2/12> [9/1] <4/21> Ru-106 (Approx. 370 days) ND ND ND 5.4 [10/28] ND ND ND 9.2 [10/28] 5.5 25 [9/2] ND ND ND ND Mn-54 (Approx. 310 days) 12 <2/3> ND ND ND ND 3.8 <12/1> ND 11 <8/25> ND 110 <11/13> ND ND The Co-60 (Approx. 5 years) [10/24] ND <5/29> ND [11/7] [11/25] 3.0 ND 1.3 <2/3> ND ND 0.51 0.44 0.9 0.61 <11/24> 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 <11/20> <1/20> 2.100 [11/17] 78^{* 2} Gross B <1/27> 2.300 1.100 <7/10> <10/9> 3.200.000 <11/13> 380 59.000 <2/3> [12/26] <5/5> 260,000 31.000 <11/24> 110 3.100.000 <1/30> 1.200.000 1.700 [7/8] [7/29] 600 <4/16> (12/1) <2/3> <10/132 860 * 2 [11/14] 440,000 [9/26] H-3 (Approx. 12 years) 71,000 <12/1> 270,000 <1/27> 85,000 [9/13] [10/31] 88,000 <2/12> 23,000 <2/13> 74,000 <7/10> 43,000 160,000 <10/16> 460,000 [8/19] 1,000 <2/23> 440 [8/26] 660 <1/8> (11/3) Sr-90(Approx. 29 years) 35,000 <2/17> [10/3] <8/4> [10/21] 160,000 28,000 <10/2> 2,700,000 990,000 <10/2> [5/31] 5.9 [7/25] 300 170 290 <2/12> <2/13> 54 320 [12/25]

																									Unit: Bq/L
		observa	ndwater ation hole 0.2-3	observa	ndwater ation hole i.2-5	observa	idwater ition hole .2-6	Groun observa No	tion hole	observa	ndwater ation hole i.2-8	observa	ndwater ation hole .2-9	pumped the we (between	ndwater d up from ell point en Unit 2 id 3)	observa	ndwater ation hole lo.3	observa	ndwater ation hole .3-1*	observa	ndwater ation hole 5.3-2	observa	ndwater ation hole 0.3-3	Groundwater observation hole No.3-4	Groundwater observation hole No.3-5
(Cs-134 (Approx. 2 years)	17	<3/11>	3.5	<2/23>	1.3	<7/20>	ND		2.2	<9/7>	3.5	[7/25]	1.2	(7/25) (8/8)	23	<8/27>	180	<7/2>	5.1	<7/23>	100	<7/30>		
(s-137 (Approx.30 years)	50	<3/11>	9.0	<2/23>	3.4	<7/20>	0.58*2	<2/11>	5.7	<9/7>	5.9	[8/8]	2.6	[8/1]	68	<9/3>	500	<7/2>	16	<8/27>	310	<7/30>		
	Ru-106 (Approx. 370 days)	ND		ND		ND		6.5*2	<2/11>	ND		ND		ND		ND		ND		ND		-			
The	Mn-54 (Approx. 310 days)	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		-			
	Sb-125 (Approx. 3 years)	ND		ND		ND		ND		ND		1.6	<1/1>	ND		ND		ND		ND		-			
	Gross β	3,200	[12/5] <11/6>	1,300	<6/20>	5,800	<7/23>	1,700	<2/7>	240,000	[12/12]	1,400	[7/11]	180	[8/1]	3,100	<8/20> <8/28>	8,900	<7/2>	46	<8/13>	510	<7/16>		
	H-3 (Approx. 12 years)	1,900	<8/10>	1,100	<1/19>	1,700	<4/6> <8/6> <8/13>	*2 13,000	<2/7> <2/11>	13,000	<10/19> <10/26> <10/29>	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)	Under analysis		ND(1.4)		3,900	<3/30>	1,200 * 2	<2/11>	-	•	8.3	〔2012. 12/12〕	4.4	[7/23]	2000	<4/18>	3,600	<4/30>	ND		200	<5/28>		

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 reference, since the water was highly turbid. (γ and Gross β were measured after filtration.)

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

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

^{* &}quot;*" is provided next to the name of the holes where the sampling could not be performed due to the chemical injection of ground improvement.

⁽Note) As for No. 1-9, 2-5, and 3-5, since September 17, γ was not measured because they are samlpled by sampler. Gross β were measured after filtration for reference.