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 Silt fence Silt fence Silt fence No.2-9 Silt fence No.0-1-2 No.2-6 No.0-1 No.1-8 No.3-5 No. 2-7 No.1-9 O No.0-1-1 No.0-3-1 No. 3-4🗖 Well point No.0-3-2 No.1 No.2-3-No. 3 No.1-17 ONo.1-16 No.2 No.0-275 No.1-12 🗢 No.2-5 No.1-6 No.2-2 No.1-14 No.1-13

: 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 Underground Water Obtained at Bank Protection

Unit: Bq/L (exclude chloride)

Underground wind redervation Underground Underground wind redervation Underground														UIIIL BQ/I	L (exclude chloride
Time of sampling		water observation	water observation	water observation	water observation	water observation	water observation	water observation	water observation	water observation	water observation	water observation	water observation	water observation	Underground water observation hole No.1-14
Ca-134 (Approx. 2 years) 2400.00 37,000 33,000	Date of sampling	/	1	1	/	/	1	/	Feb 13, 2014	/	/	/	1	Feb 13, 2014	
C6-134 (Approx. 2 years) 2400.00 37,000 33,000	Time of sampling		/			/			10:50 AM		/	/	/	11:18 AM	/
Cs-137 (Approx. 30 years) Fine Co-60 (Approx. 5 years) Fin	Chloride (unit: ppm)								-					-	
Mm-54 (Approx. 310 days) 320	Cs-134 (Approx. 2 years)								2400.00					37,000	
The other γ Gross β H-3 (Approx. 12 years) Sr-90 (Approx. 29 years) Underground water observation hole No.1-16 hole No.2-17 Date of sampling Time of sampling Time of sampling Choride (unit: ppm) Cs-313 (Approx. 30 years) The other γ Cross β Gross β H-3 (Approx. 12 years) Underground water observation hole No.2-3 Underground water observation hole No.2-5 Underground water observation hole No.2-5 Underground water observation hole No.2-5 Underground water observation hole No.2	Cs-137 (Approx.30 years)								5900.00					93,000	
Gross β Gross β Gross β Gross β Groundwater under observation hole No.1-16 Date of sampling Time of sampling Chloride (unit: ppm) Carata (Approx. 29 years) Carata (Approx. 29 years) Groundwater under observation hole No.2-2 Date of sampling Time of sampling Chloride (unit: ppm) Carata (Approx. 29 years) Carata (Approx. 29 years) Groundwater under observation hole No.2-3 Date of sampling Time of sampling Chloride (unit: ppm) Carata (Approx. 29 years)	Mn-54 (Approx. 310 days)								320					ND	
Gross β H-3 (Approx. 12 years) Sr-90 (Approx. 29 years) Underground water observation hole No.1-16 Date of sampling Time of sampling Chloride (unti: ppm) Cs-134 (Approx. 29 years) Cs-137 (Approx. 30 years) Gross β 640,000¹ Underground water observation hole No.2-5 Bate of sampling Chloride (unti: ppm) Cs-134 (Approx. 29 years) Cs-137 (Approx. 30 years) Cs-137 (Approx. 30 years)	The Co-60 (Approx. 5 years)								770					ND	
H-3 (Approx. 12 years) Sr-90 (Approx. 29 years) Underground water observation hole No.1-16 Date of sampling Time of sampling Chloride (unit: ppm) Cs-134 (Approx. 2 years) Underground water observation Cs-137 (Approx. 30 years) Underground water observation hole No.2 years) Underground water observation hole No.2 water observation hole No.2 years) Underground water observation hole No.2 water observation hole No.2-2 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.2-6 Underground water observation hole No.2-7 Underground water observation hole No.2-6 Underground water observation hole No.2-7 Underground water observation hole No.2-8 Underground water observation hole No.2-8 Underground water observa	other y														
H-3 (Approx. 12 years) Sr-90 (Approx. 29 years) Underground water observation hole No.1-16 Date of sampling Time of sampling Cs-134 (Approx. 2 years) Cs-137 (Approx. 30 years) Underground water observation hole No.2 years) Underground water observation hole No.3 water obser															
Sr-90 (Approx. 29 years) Underground water observation hole No.1-16 Date of sampling Time of sampling Chloride (unit: ppm) Cs-134 (Approx. 29 years) Underground water observation hole No.2 years) Cs-137 (Approx. 30 years) Underground water observation hole No.2 water observation hole No.2 water observation hole No.2 water observation water observation water observation hole No.2 water observation water observation water observation hole No.2 water observation water observation hole No.2 water observation water observation water observation hole No.2 water observation water observation hole No.2 water observation hole No.2 water observation water observation hole No.2 water observation hole No.2 water observation hole No.2 water observation water observation hole No.2 water observation hole No.2 water observation water observation water observation hole No.2 water observation hole No.2 water observation water observation hole No.2 water observation hole No.2 water observation hole No.2 water observation water observation hole No.2 water observation hole No.2 water observation water observation hole No.2 water observation hole No.2 water observation water observation water observation hole No.2 water observation water observation water observation water observation hole No.2 water observation water observation water observation water observation water observation water observation hole No.2 water observation water observat	Gross β								640,000 ^{*1}					260,000	
Underground water observation hole No.1-16 Date of sampling Chloride (unit: ppm) Cs-134 (Approx. 2 years) Cs-137 (Approx.30 years) The	H-3 (Approx. 12 years)								Under analysis					62,000	
Underground water observation hole No.1-16 Date of sampling Chloride (unit: ppm) Cs-134 (Approx. 2 years) The	Sr-90 (Approx. 29 years)								Under analysis				/	-	
Time of sampling Chloride (unit: ppm) Cs-134 (Approx. 2 years) Cs-137 (Approx.30 years) The		water observation	water observation	pumped up from the well point (between Unit 1	water observation	water observation	pumped up from the well point (between Unit 2	water observation	water observation	water observation					
Chloride (unit: ppm) Cs-134 (Approx. 2 years) Cs-137 (Approx.30 years) The	Date of sampling	/	1	1 /	/	/	1	/	/	/	/	/	1	/	1
Cs-134 (Approx. 2 years) Cs-137 (Approx.30 years) The	Time of sampling														
Cs-137 (Approx.30 years) The	Chloride (unit: ppm)														
The	Cs-134 (Approx. 2 years)														
	Cs-137 (Approx.30 years)														
other y / / / / / / / / / / / / / / / / / /															
	other y														
Gross β / / / / / / / / / / / / / / / / / /	Gross β														
	H-3 (Approx. 12 years)			/											
H-3 (Approx. 12 years) / / / / / / / / / / / /															

^{*} Data announced this time is provided in a thick-frame. The other data was announced on February 13.

^{* &}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.

^{*1} The highest dose among the results previously announced in the "Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection".

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

									`							,											Unit: Bq/L
		Groundwater observation hole No.0-1		Groundwater observation hole No.0-1-1		Groundwater observation hole No.0-1-2		Groundwater observation hole No.0-2		Groundwater observation hole No.0-3-1		observa	dwater ition hole 0-3-2	Groundwater observation hole No.0-4		Ground observat No	tion hole	Ground observat No.	ion hole	Ground observat No.	ion hole	Ground observati No.1	ion hole	Groun observa No.	tion hole	Ground observat No.	ion hole
Cs	-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]
Cs	-137 (Approx.30 years)	19 *2	<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]
The other γ	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	
	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	
	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 ^{*1}	[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]
Sr-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]

		Groundwater observation hole No.1-6	observation hole observation hole		Groundwater observation hole No.1-9	Groundwater observation hole No.1-10	Groundwater observation hole No.1-11			dwater tion hole 1-12	Ground observati No.1	ion hole	Ground observat No.1	ion hole	Ground observat No.	ion hole	observa	dwater tion hole 1-17		II point n Unit 1
С	s-134 (Approx. 2 years)	-	47	[11/25]	170 [9/3]	-	1.1 <1	1/13>	74	[10/21]	37,000	<2/13>	1.2 *1	[11/14]	3.1 *1	[12/13]	1.2	[12/5]	110	[9/23]
С	s-137 (Approx.30 years)	=	110	[11/25]	380 [9/3]	-	2.8 <1	1/13>	170	[10/21]	93,000	<2/13>	2.4	<2/13>	4.0	<2/13>	0.66	[12/12]	250	[9/23]
	Ru-106 (Approx. 370 days)	-	ND		ND	-	ND		5.4	[10/28]	ND		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		ND		1.1	<2/10>
other y	Co-60 (Approx. 5 years)	=	1.3	<2/3>	ND	-	ND		0.51	[10/24]	ND		ND		0.9	[11/7]	0.61	[11/25]	ND	
	Sb-125 (Approx. 3 years)	=	ND		ND	-	ND		61	[10/21]	ND		ND		11	[12/5]	2.1	[11/25]	ND	
	Gross β	*3 560,000 <2/6>	59,000	<2/3>	2,100 *3 [11/17]	78 *3 <1/27>	2,300 [12	2/26)	730	[10/21]	260,000	<2/12> <2/13>	440	<1/30> <2/13>	3,100,000	<1/20> <1/30> <2/3>	130	[12/2] [12/23]	700,000	[9/23]
	H-3 (Approx. 12 years)	*3 110,000 <2/6>	12,000	<1/6> <2/3>	*3 860 [11/14]	*3 270,000 <1/27>	85,000 [9	9/13]	440,000	[10/31]	88,000	<2/12>	19,000	<2/3> <2/6>	43,000	[9/26]	32,000	<1/20>	460,000	[8/19]
8	r-90(Approx. 29 years)	-	1,300	[9/16]	170 [9/3]	-	17 [9	9/13]	Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		-	

																										Unit: Bq/L
		observa	ndwater ation hole o.2	observa	ndwater ation hole .2-1	observat	dwater tion hole .2-2	observa	dwater tion hole .2-3	observa	dwater tion hole .2-5	observa	dwater ition hole .2-6	observa	dwater tion hole .2-7	Groundwater observation hol No.2-9	e pi	Groundwater umped up from the well point between Unit 2 and 3)	observ	indwater ration hole No.3	observa	ndwater ation hole b.3-1°	observa	ndwater ation hole 5.3-4	observa	ndwater ation hole 0.3-5
	Cs-134 (Approx. 2 years)	0.50	[7/9]	0.66	[9/1]	15	<2/12>	0.84	<1/5>	25	<2/12>	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>
(s-137 (Approx.30 years)	1.2	(7/11) (8/1)	1.1	(8/29) (9/1)	38	<2/12>	2.6	<1/5>	62	<2/12>	0.80	<2/13>	3.6	<1/12>	0.58 *2 <2/11	>	2.4 [12/7]	5.9	[8/8]	2.6	[8/1]	4.3	[11/27]	170	<1/15>
The other y	Ru-106 (Approx. 370 days)	ND		ND		ND		ND		ND		ND		ND		6.5 *2 <2/11	>	ND	ND		ND		ND		-	
	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]	-	
	Co-60 (Approx. 5 years)	ND		ND		ND		ND		ND		ND		ND		-		ND	ND		ND		ND		-	
	Sb-125 (Approx. 3 years)	ND		ND		ND		ND		30	<2/12>	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]	150,000	<2/12>	3,200	[12/5]	270	[12/20]	1,700*3 <2/7	24	0,000 [12/12]	1,400	[7/11]	180	[8/1]	17	<2/12>	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>	*3 13,000 <2/7	> 5	5,100 [12/6]	3,200	[2012/12/ 12]	460	[8/1]	170	[9/18]	170	<1/8>
	Sr-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 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.)
 3 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.