

## 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 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
	Date of sampling	/	1 /	/	/	/	/	/	/	1 /	/	/	/	/	
	Time of sampling	/	/	/	/	/	/	/	/	/	/	/	/	/	,
	Chloride (unit: ppm)		/	/	/	/	/	/	/	/	/	/	/	/	/
С	s-134 (Approx. 2 years)		/	/	/	/	/		/	/	/	/	/	/	/
C	s-137 (Approx.30 years)		/	/	/	/	/	/	/	/	/	/	/	/	/
			/	/	/	/	/	/	/	/	/	/	/	/	/
The			/	/	/	/	/	/	/	/	/	/	/	/	/
other y				/	/	/	/	/	/		/	/	/	/	
				/	/	/	/		/				/	/	
	Gross β	1/		/	/	/	/	/	/		/	/	/	/	/
I	H-3 (Approx. 12 years)	1/	1/	/	/	/	/	/	/	1/	/	/	/	/	/
S	r-90 (Approx. 29 years)	/	/	/	/	/	/	/	/	/	/	/	/	/	/
			I	1		1				r	Г		1		r
		Underground	Groundwater pumped up from	Underground	Line de server a d						Groundwater				
		water observation hole No.1-17	the well point (between Unit 1 and 2)	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	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		the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation	water observation	the well point (between Unit 2	water observation	water observation	water observation	,
	Date of sampling Time of sampling		the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation hole No.2-7	water observation	the well point (between Unit 2	water observation	water observation	water observation	-
			the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation hole No.2-7 Mar 12, 2014	water observation	the well point (between Unit 2	water observation	water observation	water observation	
C	Time of sampling		the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation hole No.2-7 Mar 12, 2014 9:54 AM	water observation	the well point (between Unit 2	water observation	water observation	water observation	-
	Time of sampling Chloride (unit: ppm)		the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation hole No.2-7 Mar 12, 2014 9:54 AM 860	water observation	the well point (between Unit 2	water observation	water observation	water observation	
	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)		the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation hole No.2-7 Mar 12, 2014 9:54 AM 860 0.53	water observation	the well point (between Unit 2	water observation	water observation	water observation	
	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)		the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation hole No.2-7 Mar 12, 2014 9:54 AM 860 0.53	water observation	the well point (between Unit 2	water observation	water observation	water observation	
C	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)		the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation hole No.2-7 Mar 12, 2014 9:54 AM 860 0.53	water observation	the well point (between Unit 2	water observation	water observation	water observation	
C: The	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)		the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation hole No.2-7 Mar 12, 2014 9:54 AM 860 0.53	water observation	the well point (between Unit 2	water observation	water observation	water observation	
C: The	Time of sampling Chloride (unit: ppm) s-134 (Approx. 2 years)		the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation hole No.2-7 Mar 12, 2014 9:54 AM 860 0.53	water observation	the well point (between Unit 2	water observation	water observation	water observation	
C: The other y	Time of sampling Chloride (unit: ppm) cs-134 (Approx. 2 years) cs-137 (Approx.30 years)		the well point (between Unit 1	water observation	water observation	water observation	water observation	water observation	water observation hole No.2-7 Mar 12, 2014 9:54 AM 860 0.53 1.4	water observation	the well point (between Unit 2	water observation	water observation	water observation	

\* Data announced this time is provided in a thick-frame. The other data was announced on March 13.

\* "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 (2/2) 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	/	/	/	/	/	/	/	/	1 /	/ /	/	/	/	/
	Time of sampling	/	/	/	/	/	/	/	/	/		/	/	/	/
	Chloride (unit: ppm)		/	/	/	/	/	/	/	/		/	/	/	/
С	Cs-134 (Approx. 2 years)		/	/	/	/	/	/	/			/	/	/	/
C	s-137 (Approx.30 years)	/		/	/	/	/	/	/	/		/	/	/	/
		/	/	/	/	/	/	/	/	/	/	/	/	/	/
The		/	/	/	/	/	/	/	/		/	/	/	/	/
other y							/					/		/	
						/	/	/	/			/		/	
	Gross β			/											
I	H-3 (Approx. 12 years)	/	/	/	/	/	/	/	/	/	/	/	/	/	/
S	r-90 (Approx. 29 years)	/	/	/	/	/	/	/	/	/	/	/	/	/	/

		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.2-8	Groundwater pumped up from the well point (between Unit 2 and 3)	Underground water observation hole No.3	Underground water observation hole No.3-4	Underground water observation hole No.3-5	
	Date of sampling	/	/	/	/	/	/	/	Mar 14, 2014	/	/	/	1	/ /	
	Time of sampling	/	/	/	/	/	/	/	9:45 AM	/	/	/	/	/	
	Chloride (unit: ppm)		/	/	/	/	/	/	850		/	/			
C	Cs-134 (Approx. 2 years)	/	/	/	/	/	/	/	ND(0.43)	/	/			/	
Cs	s-137 (Approx.30 years)	/	/	/	/	/	/	/	0.96	/	/	/	/	/	
		/	/	/	/	/	/	/		/	/	/	/	/	
The				/	/	/	/	/		/	/				
other $\gamma$	,			/	/	/	/	/							
						/	/			/	/				
	Gross β			/		/		/	500	/	/			/	
ŀ	H-3 (Approx. 12 years)	/	/	/	/	/	/	/	Under analysis	/	/	/	/	/	
Si	Gr-90 (Approx. 29 years)	/	/	/	/	/	/	/	-	/	/	/	/	/	

\* "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.

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

		Groundwater Groundwater Groundwater Gro			Ground	ndwater	Groundwater Groundwater Groundwa						Ground	ndwater	Grour	dwater	Grour	ndwater	Groundwater		Grou	ndwater	Unit: Bo Groundwater			
		observation hole No.0-1	observa	ation hole .0-1-1	observa	ation hole 0-1-2	observa	ation hole	observa	ation hole 0-3-1	observa	ation hole 0-3-2	observa	tion hole .0-4	observa	ation hole	observa	ition hole	observa	ation hole	observ	ation hole	observa	ation hole	observa	
Cs-134 (Approx. 2 years)		9.8 *2 <3/9>	0.61	<3/2>	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
С	s-137 (Approx.30 years)	25 <sup>*2</sup> <3/9>	1.5	<3/2>	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
	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		0.64	<2/20>	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	(
	Gross β	300 [ 8/22 ]	21	[ 12/7 ]	21	[ 11/10 ]	87	[ 10/13 ]	ND		67 <sup>*1</sup>	[ 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	()
	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
;	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
																										Unit
		observation hole observ		Groundwater servation hole No.1-8 No.1-9 Groundwater observation hole No.1-9		ation hole	Groundwater observation hole No.1-10		Groundwater observation hole No.1-11		Groundwater observation hole No.1-12		Groundwater observation hole No.1-13		Groundwater observation hole No.1-14		Groundwater observation hole No.1-16		Groundwater observation hole No.1-17		Groundwater pumped up from the well point (between Unit 1 and 2)		observation hole		Groundwate observation ho No.2-1	
C	s-134 (Approx. 2 years)	3,800 <3/6>*2 <3/10>	47	[ 11/25 ]	170	[ 9/3 ]	-		1.1	<1/13>	74	[ 10/21 ]	37,000	<2/13>		2 <2/27>	3.1 *1	[ 12/13 ]	1.2	[ 12/5 ]	110	[ 9/23 ]	0.88	<2/26>	0.66	(
С	s-137 (Approx.30 years)	9,700 <3/10>	110	[ 11/25 ]	380	[ 9/3 ]	-		2.8	<1/13>	170	[ 10/21 ]	93,000	<2/13>	230	2 <2/27>	4.7	<2/17>	1.5	<3/10>	250	[ 9/23 ]	2.5	<2/26>	1.1	8] [
	Ru-106 (Approx. 370 days)	ND	ND		ND		-		ND		5.4	[ 10/28 ]	ND		ND		9.2	[ 10/28 ]	4.1	[ 12/12 ]	25	[9/2]	ND		ND	
The	Mn-54 (Approx. 310 days)	320 <2/13> <2/17>	12	<2/3>	ND		-		ND		ND		ND		ND		ND		ND		5.9	<3/3>	ND		ND	
other y	Co-60 (Approx. 5 years)	830 <2/20>	1.3	<2/3>	ND		-		ND		0.51	[ 10/24 ]	ND		ND		0.9	[ 11/7 ]	0.61	[ 11/25 ]	ND		ND		ND	
	Sb-125 (Approx. 3 years)	ND	ND		ND		-		ND		61	[ 10/21 ]	ND		ND		11	[ 12/5 ]	2.1	[ 11/25 ]	ND		ND		ND	
	Gross β	760,000 <2/17>	59,000	<2/3>	2,100 *2	( 11/17 )	78 *2	<1/27>	2,300	[ 12/26 ]	730	[ 10/21 ]	260,000	<2/12> <2/13>	850	<3/13>	3,100,000	<1/20> <1/30> <2/3>	1,400	<3/13>	700,000	[ 9/23 ]	1,700	[ 7/8 ]	380	(7
	H-3 (Approx. 12 years)	*2 110,000 <2/6>	12,000	<1/6> <2/3>	*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>	43,000	[ 9/26 ]	32,000	<1/20>	460,000	(8/19)	1,000	<2/23>	440	(8
;	Sr-90(Approx. 29 years)	-	1,300	[9/16]	170	[ 9/3 ]	-		17	[9/13]	Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		-		54	[5/31]	5.9	(7
																								Unit: Bq/L	·	
		Groundwater observation hole No.2-2 No.2-3		ation hole	Groundwater observation hole No.2-5		Groundwater observation hole No.2-6		Groundwater observation hole No.2-7		Groundwater observation hole No.2-8		Groundwater observation hole No.2-9		Groundwater pumped up from the well point (between Unit 2 and 3)		observation hole		Groundwater observation hole No.3-1		Groundwater observation hole No.3-4		Groundwater observation hole No.3-5			
C	s-134 (Approx. 2 years)	15 <2/12>	2.2	<2/26>	25	<2/12>	17	<3/11>	3.5	<2/23>	-		-		1.2	<3/9>	3.5	[ 7/25 ]	1.2	[7/25] [8/8]	1.9	<1/8>	64	<1/15>		
		38 <2/12>	5.5	<2/26>	62	<2/12>	50	<3/11>	9.0	<2/23>	-		0.58 *2	<2/11>	3.1	<3/9>	5.9	[8/8]	2.6	[8/1]	5.2	<3/13>	170	<1/15>		
С	s-137 (Approx.30 years)	38 <2/12>	0.0	~2/20>	02	~2/122	00								-			( )								

ND

ND

ND

5,100

240,000 [12/12]

[ 12/6 ]

ND

ND

1.6

1,400

3,200

8.3

<1/1>

[7/11]

(2012/12/

12]

(2012/12/

12)

ND

ND

ND

180

460

4.4

[8/1]

[8/1]

[7/23]

0.54

ND

ND

18

170 [ 9/18 ]

ND

[ 10/30 ]

<3/12>

-

-

69

170

<1/29>

<1/8>

Sr-90(Approx. 29 years) analysis analysis analysis analysis analysis Since some samples are still under analysis, the highest dose of the Strontium-90 is among those previously announced.

[ 12/6 ]

[ 12/6 ]

[ 12/6 ]

0.94

ND

30

150,000

6,300

Under

<1/8>

<2/12>

<2/12>

[ 12/4 ]

ND

ND

ND

3,200

1,200

Under

[ 12/5 ]

[11/24]

(11/27)

ND

ND

ND

570

1,100

Under

<3/12>

<1/17>

-

-

1300

2,700<sup>\*2</sup> <3/2>

<3/9>

-

-

1,700<sup>\*2</sup>

13,000

\*2

<2/7>

<2/7>

\*1 Analysis result of pumped water.

Mn-54 (Approx. 310 days)

Co-60 (Approx. 5 years)

Sb-125 (Approx. 3 years)

Gross β

H-3 (Approx. 12 years)

The other y

\*2 The results are for a reference, since the water was highly turbid. ( $\gamma$  and Gross  $\beta$  were measured after filtration.)

0.29

ND

ND

1,500

1,700

Under

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

ND

ND

ND

560

660

Under

<3/12>

<1/8>

\* 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.