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

		Underground water observation hole No.0-1	Underground water observation hole No.1	Underground water observation hole No.1-2	Underground water observation hole No.1-3	Underground water observation hole No.1-4	Underground water observation hole No.1-5	Underground water observation hole No.1-8	Groundwater pumped up from the well point	Underground water observation hole No.2	Underground water observation hole No.2-1	Underground water observation hole No.3	Underground water observation hole No.3-1
	Date of sampling	Aug 22, 2013	Aug 22, 2013	Aug 22, 2013	Aug 22, 2013	Aug 22, 2013	Aug 22, 2013	/	/	Aug 22, 2013	Aug 22, 2013	/	Aug 22, 2013
	Time of sampling	9:41 AM	10:58 AM	12:33 PM	11:25 AM	10:20 AM	12:00 PM			9:25 AM	9:57 AM		11:55 AM
C	s-134 (Approx. 2 years)	ND(0.42)	ND(0.57)	150	1.0	1.0	91			ND(0.41)	ND(0.43)		0.68
Cs	s-137 (Approx.30 years)	0.64	0.66	360	2.3	1.8	190			0.74	ND(0.56)		1.2
	Ru-106 (Approx. 370 days)	ND	7.9	ND	12	ND	ND			ND	ND		ND
The other y													
	ΑΙΙ β	300	1,500	840,000	130,000	240	6,200			270	17		55
ŀ	H-3 (Approx. 12 years)	42,000	430,000	400,000	220,000	21,000	28,000			450	310		240
Sr	r-90 (Approx. 29 years)	-	Under analysis	-	-	-	Under analysis	/	/	-	-		-

<sup>\*</sup> Data announced this time is provided in a thick-frame. The other data was announced on August 23.

<sup>\* &</sup>quot;ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

<sup>\* &</sup>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

		Underground water observation hole No.0-1	Underground water observation hole No.1	Underground water observation hole No.1-2	Underground water observation hole No.1-3	Underground water observation hole No.1-4	Underground water observation hole No.1-5	Underground water observation hole No.1-8	Groundwater pumped up from the well point	Underground water observation hole No.2	Underground water observation hole No.2-1	Underground water observation hole No.3	Underground water observation hole No.3-1
	Date of sampling	/	Aug 26, 2013	Aug 26, 2013	Aug 26, 2013	/	Aug 26, 2013	Aug 26, 2013	Aug 26, 2013	Aug 26, 2013	Aug 26, 2013	/	/
	Time of sampling		10:36 AM	12:35 PM	11:18 AM	/	12:00 PM	9:36 AM	10:30 AM	10:15 AM	9:45 AM		
C	s-134 (Approx. 2 years)		ND(0.47)	110	1.1		53	26	1.0	ND(0.43)	ND(0.43)		
Cs	s-137 (Approx.30 years)		0.84	270	2.1		110	58	2.1	0.66	ND(0.54)		
	Mn-54 (Approx. 310 days)		ND	ND	ND		ND	0.52	ND	ND	ND		
The other y	Ru-106 (Approx. 370 days)		14	ND	5.1		ND	ND	9.7	ND	ND		
	Sb-125 (Approx. 3 years)		ND	ND	1.4		ND	ND	ND	ND	ND		
	All β		1,500	760,000	61,000		3,400	1,200	5,900	86	ND(18)		
F	H-3 (Approx. 12 years)		Under analysis	Under analysis	Under analysis		Under analysis	Under analysis	Under analysis	Under analysis	Under analysis		
Sr	-90 (Approx. 29 years)		-	-	-		-	-	-	-	-	/	

<sup>\* &</sup>quot;ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

<sup>\* &</sup>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) 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)	1F, Between the water intake channel of Unit 1 and Unit 2 (surface layer)	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	1F, Unit 3 Screen (Inside the Silt Fence)
Date of Sampling	Aug 26, 2013	Aug 26, 2013	Aug 26, 2013	/	Aug 26, 2013	Aug 26, 2013			Aug 26, 2013	Aug 26, 2013	Aug 26, 2013
Time of sampling	6:00 AM	5:50 AM	5:48 AM		6:28 AM	5:58 AM			6:04 AM	6:08 AM	6:14 AM
Cs-134(Approx. 2 years)	ND(1.2)	ND(2.0)	ND(2.0)	/	ND(2.1)	23			12	8.2	14
Cs-137(Approx.30 years)	ND(1.7)	ND(2.5)	ND(2.2)		ND(2.2)	50			35	24	43
ΑΙΙ β	ND(19)	ND(21)	28		29	530			280	280	300
H-3 (Approx. 12 years)	Under analysis	Under analysis	Under analysis		Under analysis	Under analysis			Under analysis	Under analysis	Under analysis
Sr-90 (Approx. 29 years)	-	-	-	/	-	-	/	/	-	-	-

	1F, Between the water intake channel of Unit 3 and Unit 4	Screen	1F, Around the south discharge channel	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*	East side of the port entrance*	South side of the south breakwater*
Date of Sampling	Aug 26, 2013	Aug 26, 2013	Aug 26, 2013							/	
Time of sampling	6:20 AM	6:18 AM	5:20 AM								
Cs-134(Approx. 2 years)	12	13	ND(1.1)							/	
Cs-137(Approx.30 years)	26	34	ND(1.0)		/					/	
ΑΙΙ β	320	270	ND(19)								
H-3 (Approx. 12 years)	Under analysis	Under analysis	Under analysis		/	/	/	/		/	
Sr-90 (Approx. 29 years)	-	=	-	/	/	/	/	/	/	/	V

<sup>\* &</sup>quot;ND" indicates that the measurement result is below the detection limit, and the detection limit of each nuclide is provided in parentheses.

<sup>\* &</sup>quot;-" indicates that the measurement was out of range.

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

Unit: Bq/L

		observa	ndwater ation hole .0-1	Ground observati No	tion hole	Ground observat No.	ion hole	Ground observat No.	ion hole	Ground observati No.	tion hole	observa	dwater tion hole .1-4	observa	dwater tion hole .1-5	Ground observat No.	tion hole		er pumped well point
С	s-134 (Approx. 2 years)	0.66	(8/10)	3.2	(8/19)	1.9	[ 7/8 ]	11,000	[7/9]	ND		1.5	[ 7/8 ]	[ 11/5 ]	[ 8/5 ]	21	[ 8/20 ]	1.5	[8/19]
C	s-137 (Approx.30 years)	1.6	[8/8]	4.3	[ 8/19 ]	3.6	[ 7/8 ]	22,000	[7/9]	2.3	[ 8/22 ]	3.6	[7/8]	[10/11]	[8/5]	45	[ 8/20 ]	3.4	[8/19]
	Ru-106 (Approx. 370 days)	ND		26	[ 5/24 ]	7.9	[ 7/8 ]	160	[8/15]	17	(7/22) (8/8)	3.1	[ 8/8 ]	ND		ND		17	[8/19]
The	Mn-54 (Approx. 310 days)	ND		ND		1.0	[ 7/5 ]	62	[7/5]	ND		ND		ND		ND		ND	
other y	Co-60 (Approx. 5 years)	ND		0.50	[ 7/19 ]	ND		3.1	[7/8]	ND		ND		ND		ND		ND	
	Sb-125 (Approx. 3 years)	ND		1.7	(7/11)	ND		250	(7/15)	1.4	[ 7/12 ]	ND		[ 1/12 ]	[ 8/8 ]	ND		ND	
	ΑΙΙ β	300	[ 8/22 ]	1,900	[ 5/24 ]	4,400	[ 7/8 ]	900,000	(7/5) (7/9)	160,000	(8/12) (8/15)	380	(8/19)	( 4/26 )	[ 8/5 ]	1,100	[ 8/20 ]	190000	[8/19]
ŀ	H-3 (Approx. 12 years)	35,000	[8/15]	500,000	(5/24) (6/7)	630,000	[ 7/8 ]	390,000	[8/5]	290,000	[7/12]	98,000	(7/11)	[ 2/14 ]	(8/15)	950	[ 8/20 ]	460,000	[ 8/19 ]
S	6r-90(Approx. 29 years)	Under analysis		1,200	[6/7]	Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		Under analysis		-	

		observa	ndwater ution hole o.2	Ground observat No.		observ	ndwater ation hole lo.3	Ground observat No.	ion hole
Cs	s-134 (Approx. 2 years)	0.5	[7/9]	0.44	[ 8/1 ]	3.5	[ 7/25 ]	1.2	[7/25] [8/8]
Cs	s-137 (Approx.30 years)	1.2	(7/11) (8/1)	1.0	[ 7/29 ]	5.9	[ 8/8 ]	2.6	[ 8/1 ]
	Ru-106 (Approx. 370 days)	ND		ND		ND		ND	
The	Mn-54 (Approx. 310 days)	ND		ND		ND		ND	
other y	Co-60 (Approx. 5 years)	ND		ND		ND		ND	
	Sb-125 (Approx. 3 years)	ND		ND		ND		ND	
	ΑΙΙ β	1,700	[7/8]	380	[ 7/29 ]	1,400	[ 7/11 ]	180	[ 8/1 ]
ŀ	H-3 (Approx. 12 years)	850	[6/26]	290	[8/12]	3,200	[2012/12/1 2]	460	[ 8/1 ]
s	r-90(Approx. 29 years)	54	[ 5/31 ]	Under analysis		8.3	[2012/12/1 2]	Under analysis	

<sup>\* &</sup>quot;ND" indicates that the measurement result is below the detection limit.

<sup>\*</sup> Date of sampling is provided in parentheses.

#### <Reference> The Highest Dose Until the Previous Measurement\* (Seawater)

Unit: Bq/L

	Unit 5,6	rth side of discharge annel		ont of Unit 6 ake channel	,	front of draft quay	1F, Nort Unit 1-4 w cha		Unit 1-4 w channel ( of East	th side of rater intake north side Seawall eak)	(Inside	t 1 Screen e the Silt ence)	water inta of Unit 1		water into	tween the ake channel and Unit 2 er layer)	(Inside	2 Screen the Silt nce)	water inta of Unit 2		water into	tween the ake channel and Unit 3 er layer)	(Inside	3 Screen the Silt nce)
Cs-134(Approx. 2 years)	1.8	[6/21]	2.4	[8/19]	5.3	[ 8/5 ]	34	[ 8/13 ]	16	[8/12]	24	/12] [8/	1 27	[8/11]	9.9	[ 7/23 ]	26	[8/19]	21	(8/12)	3.5	(8/20)	350	(7/15)
Cs-137(Approx.30 years)	3.3	[ 6/26 ]	4.7	[8/19]	8.6	( 8/5 )	81	[ 8/13 ]	33	[8/12]	51	[ 8/12 ]	56	[ 8/11 ]	20	/15] [8/2	52	[ 8/19 ]	37	[8/12]	9.8	[8/20]	770	[ 7/15 ]
ΑΙΙ β	ND		46	[8/19]	40	[ 7/3 ]	1,100	[ 8/15 ]	320	[8/12]	700	[ 8/12 ]	740	[ 8/15 ]	450	[7/16]	490	(8/19)	410	[8/12]	85	[8/20]	1000	[ 7/15 ]
H-3 (Approx. 12 years)	8.6	[6/26]	11	[7/15]	340	[ 6/26 ]	4,700	[ 8/15 ]	460	[7/15]	2,500	[ 8/12 ]	2,600	[ 8/15 ]	1,200	[ 8/4 ]	820	(8/19)	720	[8/12]	-		380	[ 8/12 ]
Sr-90 (Approx. 29 years)	5.8	[ 6/26 ]	-		7.4	[6/26]	Under analysis		Under analysis		Under analysis	i	Under analysis		Under analysis	<b>;</b>	Under analysis		Under analysis		-		Under analysis	

			e channel water intake channe nd Unit 4 of Unit 3 and Unit 4		el 1F, Unit 4 Screen		1F, Around the south discharge channel		1F, Port entrance		· ·	side in the ort		side in the ort		n side in the port	,	n side in the port	North side of the north breakwat		South side of the south breakwater
Cs-134(Approx. 2 years)	22	[8/12]	4.8	[ 8/20 ]	46	[ 7/8 ]	ND		1.6	(8/19)	2.9	[8/19]	2.6	[8/19]	ND		2.1	[8/19]	ND	ND	ND
Cs-137(Approx.30 years)	45	[ 8/12 ]	7.7	[ 8/20 ]	93.0	[ 7/8 ]	3.0	[7/15]	4.7	(8/19)	6.6	[8/19]	6.5	[8/19]	4.7	[ 8/19 ]	4.6	[8/19]	ND	ND	ND
ΑΙΙ β	390	[ 8/12 ]	57	[ 8/20 ]	310	[ 8/12 ]	ND		69	(8/19)	74	[8/19]	60	[ 7/4 ]	69	(8/19)	79	[8/19]	ND	ND	ND
H-3 (Approx. 12 years)	650	[ 8/12 ]	-		400	[ 8/12 ]	ND		68	(8/19)	67	[8/19]	59	[8/19]	52	[8/19]	60	[8/19]	4.7 ( 8/1	l) ND	ND
Sr-90 (Approx. 29 years)	Under analysis	;	-		Under analysis		0.36	[ 6/26 ]	3.5	[6/20]	Under analysis		Under analysis		-		-		-	-	-

<sup>\*</sup> 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.

<sup>\* &</sup>quot;ND" indicates that the measurement result is below the detection limit.

<sup>\*</sup> Date of sampling is provided in parentheses.

<sup>\* &</sup>quot;-" indicates that the measurement was out of range.