# 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	water observation water observation water observation		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		
	ΑΙΙ β		1,500	760,000	61,000		3,400	1,200	5,900	86	ND(18)		
H	H-3 (Approx. 12 years)		420,000	380,000	250,000		30,000	840	260,000	440	440		
Sr	-90 (Approx. 29 years)		-	-	-		-	-	-	-	-	V	/

<sup>\*</sup> Data announced this time is provided in a thick-frame. The other data was announced on August 27.

<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) 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 (Inside the Silt Fence)	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 27, 2013	Aug 26, 2013	Aug 26, 2013	Aug 27, 2013	Aug 27, 2013	Aug 26, 2013	Aug 26, 2013	Aug 26, 2013
Time of sampling	6:00 AM	5:50 AM	5:48 AM	6:07 AM	6:28 AM	5:58 AM	6:15 AM	6:15 AM	6:04 AM	6:08 AM	6:14 AM
Cs-134(Approx. 2 years)	ND(1.2)	ND(2.0)	ND(2.0)	33	ND(2.1)	23	26	3.4	12	8.2	14
Cs-137(Approx.30 years)	ND(1.7)	ND(2.5)	ND(2.2)	78	ND(2.2)	50	64	7.9	35	24	43
All β	ND(19)	ND(21)	28	640	29	530	500	250	280	280	300
H-3 (Approx. 12 years)	8.3	5.9	ND(120)	2000	ND(120)	1400	1400	230	380	350	260
Sr-90 (Approx. 29 years)	-	-	-	-	=	-	-	-	-	-	-

	1F, Between the water intake channel of Unit 3 and Unit 4	Screen	1F, Around the south discharge channel	I POR	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)	310	280	ND(1.7)			/	/		/	/	
Sr-90(Approx. 29 years)	-	-	-		/	/	/	/		/	

<sup>\*</sup> Data announced this time is provided in a thick-frame. The other data was announced on August 27 and 28.

<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 29, 2013	/		Aug 29, 2013	Aug 29, 2013			
Time of sampling				6:13 AM			6:25 AM	6:25 AM			
Cs-134(Approx. 2 years)				35	/		26	13			
Cs-137(Approx.30 years)				78			57	25			
ΑΙΙ β				830			500	340			
H-3 (Approx. 12 years)				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		/				/		/		/	
Time of sampling											
Cs-134(Approx. 2 years)								/			
Cs-137(Approx.30 years)											
ΑΙΙ β											
H-3 (Approx. 12 years)											
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.

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

Unit: Bq/L

		observa	ndwater ation hole .0-1	Ground observat No	tion hole	Ground observati No.	on 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.	ion hole		er pumped e well point
С	s-134 (Approx. 2 years)	1.4	[8/29]	13	[8/29]	1.9	[7/8]	11,000	[7/9]	1.3	[8/29]	1.5	[7/8]	[11/5]	[8/5]	26	[8/26]	1.5	[8/19]
C	s-137 (Approx.30 years)	3	[8/29]	31	[8/29]	3.6	[7/8]	22,000	[7/9]	3.3	[8/29]	3.6	[7/8]	[10/11]	[8/5]	58	[8/26]	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		0.52	[8/26]	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) (8/26)	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]	1,200	[8/26]	190000	[8/19]
ŀ	H-3 (Approx. 12 years)	42,000	[8/22]	500,000	[5/24] [6/7]	630,000	[7/8]	400,000	[8/22]	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	dwater tion hole p.2	Ground observat No.	ion hole	observ	ndwater ation hole lo.3	Ground observat No.	ion hole
Cs	s-134 (Approx. 2 years)	0.50	[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]	1.1	[8/29]	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]	330	[8/19]	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	th side of discharge annel	, ,	nt of Unit 6 ake channel	,	front of draft quay	Unit 1-4 w		Unit 1-4 w channel ( of East	north side	(Inside	t 1 Screen e the Silt ence)	water inta		water into	ween the ake channel and Unit 2 r layer)	(Inside	2 Screen the Silt nce)	water inta of Unit 2	ween the ke channel and Unit 3 e layer)	water inta of Unit 2	ween the ake channel and Unit 3 r 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/	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]	64	[8/27]	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]	24	[8/19]	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		Under analysis		Under analysis		Under analysis		Under analysis		-		Under analysis	

	water inta		water int of Unit 3	etween the cake channel 3 and Unit 4 er layer)	(Inside	4 Screen the Silt nce)	south d	ound the lischarge annel	1F, Por	t entrance		side in the ort		side in the ort		side in the ort	,	n side in the port	North sid		East side of the port entrance	South side of the south breakwater
Cs-134(Approx. 2 years)	-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	[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	[8/14]	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.