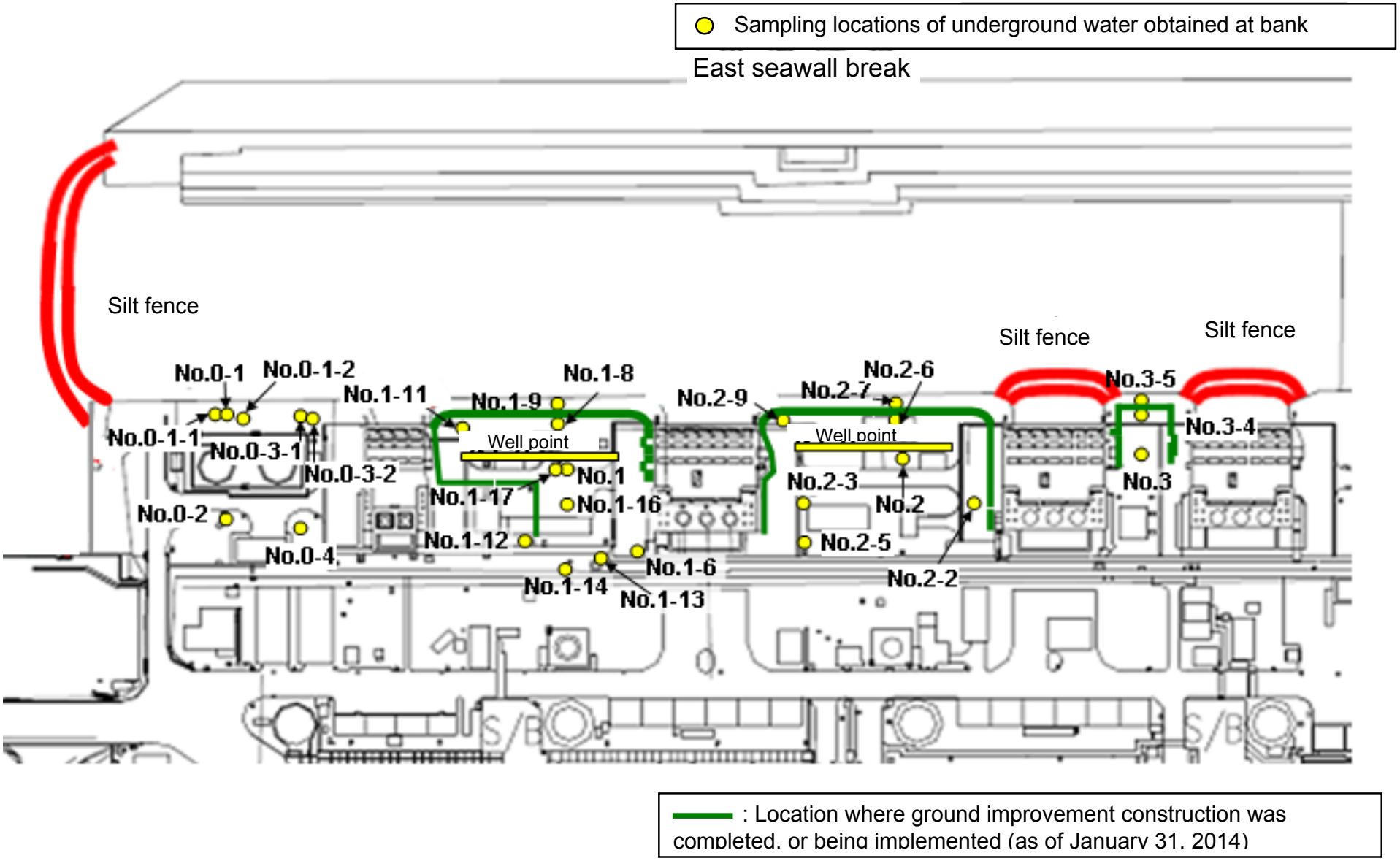
<Reference>
February 26, 2014
Tokyo Electric Power Company

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 (1/4)
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														
Time of sampling														
Chloride (unit: ppm)														
Cs-134 (Approx. 2 years)														
Cs-137 (Approx.30 years)														
The other γ														
Gross β														
H-3 (Approx. 12 years)														
Sr-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	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							Feb 25, 2014					
Time of sampling							9:26 AM					
Chloride (unit: ppm)							—					
Cs-134 (Approx. 2 years)							5.0 *1					
Cs-137 (Approx.30 years)							12 *1					
The other γ												
Gross β							2,200					
H-3 (Approx. 12 years)							Under analysis					
Sr-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.

*1 The highest measurement value (compared to the previous values provided in the handouts published in 'Detailed Analysis Results in the Port of Fukushima Daiichi NPS, around Discharge Channel and Bank Protection')

* The measurement result of Cs-134 and Cs-137 at the groundwater observation hole No.2-6 thus far were 'below the detection limit value' or 'minutely above the detection limit value'. We will conduct the sampling measurement again on February 26, for the latest measurement result was more than ten times as high as the previous result.

<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	Groundwater observation hole No.0-3-2	Groundwater observation hole No.0-4	Groundwater observation hole No.1	Groundwater observation hole No.1-1*	Groundwater observation hole No.1-2*	Groundwater observation hole No.1-3*	Groundwater observation hole No.1-4*	Groundwater observation hole No.1-5*
Cs-134 (Approx. 2 years)		7.9 *2 <2/23>	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)		20 *2 <2/23>	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	0.64 <2/20>	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>	6,800 <2/16>	ND	76,000 <2/6>	52,000 <2/16>	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〕

Unit: Bq/L

		Groundwater observation hole No.1-6	Groundwater observation hole No.1-8	Groundwater observation hole No.1-9	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)
Cs-134 (Approx. 2 years)		2,900 <2/17> <2/20>	47 〔11/25〕	170 〔9/3〕	-	1.1 <1/13>	74 〔10/21〕	37,000 <2/13>	5.4 <2/17>	3.1 *1 〔12/13〕	1.2 〔12/5〕	110 〔9/23〕
Cs-137 (Approx.30 years)		7,300 <2/17>	110 〔11/25〕	380 〔9/3〕	-	2.8 <1/13>	170 〔10/21〕	93,000 <2/13>	13 <2/17>	4.7 <2/17>	1.0 <2/20>	250 〔9/23〕
The other γ	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〕
	Mn-54 (Approx. 310 days)	320 <2/13> <2/17>	12 <2/3>	ND	-	ND	ND	ND	ND	ND	ND	4.4 <2/24>
	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
	Sb-125 (Approx. 3 years)	ND	ND	ND	-	ND	61 〔10/21〕	ND	ND	11 〔12/5〕	2.1 〔11/25〕	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>	730 <2/17>	3,100,000 <1/20> <1/30> <2/3>	130 〔12/2〕〔12/23〕	700,000 〔9/23〕
H-3 (Approx. 12 years)		110,000 *2 <2/6>	12,000 <1/6> <2/3>	860 *2 〔11/14〕	270,000 *2 <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〕
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	—

Unit: Bq/L

		Groundwater observation hole No.2	Groundwater observation hole No.2-1*	Groundwater observation hole No.2-2	Groundwater observation hole No.2-3	Groundwater observation hole No.2-5	Groundwater observation hole No.2-6	Groundwater observation hole No.2-7	Groundwater observation hole No.2-9	Groundwater pumped up from the well point (between Unit 2 and 3)	Groundwater observation hole No.3	Groundwater observation hole No.3-1*	Groundwater observation hole No.3-4	Groundwater observation hole No.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〕	3.5 <2/23>	-	1.1 〔12/12〕	3.5 〔7/25〕	1.2 〔7/25〕〔8/8〕	1.9 <1/8>	64 <1/15>
Cs-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>	9.0 <2/23>	0.58 *2 <2/11>	2.6 <2/16>	5.9 〔8/8〕	2.6 〔8/1〕	4.5 <2/19>	170 <1/15>
The other γ	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〕	350 <2/21>	1,700 *2 <2/7>	240,000 〔12/12〕	1,400 〔7/11〕	180 〔8/1〕	17 <2/12>	69 <1/29>
H-3 (Approx. 12 years)		870 〔12/8〕 <2/12>	440 〔8/26〕	660 <1/8>	1,700 〔12/6〕	6,300 〔12/4〕	1,200 〔11/24〕〔11/27〕	1,100 <1/17>	13,000 *2 <2/7>	5,100 〔12/6〕	3,200 〔H24. 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 〔H24. 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.)

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

* Date of sampling is provided in parentheses: 〔mm/dd〕for 2013 and <mm/dd > for 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.