Reference
June 19, 2011

Results of Nuclide Analyses of Sub-drain Water nearby Centralized Radiation Waste Treatment Facility (1/3)

I-131(Bq/cm^3)

Place of sampling	Before transfer				After transfer																							
	4/16	4/17	4/18	4/19	4/20	4/21	4/22	4/23	4/24	4/25	4/26	4/27	4/28	4/29	4/30	5/1	5/2	5/3	5/4	5/5	5/6	5/7	5/8	5/9	5/10	5/11	5/12	5/13
①	–	0.83	0.54	0.32	0.15	2.1	–	0.21	0.18	0.09	0.07	0.05	0.06	0.03	0.03	0.008	0.01	0.02	0.02	0.01	0.02	ND	ND	ND	0.01	ND	ND	0.16
②	0.13	0.11	0.11	0.09	0.11	0.11	0.11	0.19	0.16	0.21	0.19	0.18	0.16	0.16	0.16	0.12	0.1	0.09	0.1	0.09	0.11	0.08	0.08	0.07	0.06	0.05	0.05	0.04
③	–	–	–	0.04	0.05	0.06	0.06	0.05	0.04	0.03	0.03	0.02	0.03	0.02	0.02	0.012	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.02
④	0.09	–	0.12	–	–	–	–	–	–	0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
⑤	0.5	0.35	0.42	0.34	0.33	0.15	0.07	0.15	0.78	0.23	0.13	0.12	0.19	0.08	0.06	0.051	0.05	0.02	0.02	0.02	0.03	0.02	0.05	0.02	0.05	0.04	0.03	0.05
⑥	–	–	–	–	–	–	–	–	–	–	-	-	-	0.06	-	-	0.06	-	-	-	-	-	-	0.03	-	-	-	-

Cs-134(Bq/cm^3)

Place of sampling	Before transfer				After transfer																							
	4/16	4/17	4/18	4/19	4/20	4/21	4/22	4/23	4/24	4/25	4/26	4/27	4/28	4/29	4/30	5/1	5/2	5/3	5/4	5/5	5/6	5/7	5/8	5/9	5/10	5/11	5/12	5/13
①	–	0.08	0.08	0.1	0.1	0.48	–	0.22	0.15	0.12	0.12	0.12	0.21	0.12	0.15	0.065	0.1	0.14	0.09	0.09	0.06	0.04	0.06	0.05	0.11	0.03	0.04	0.15
②	ND	0.05	0.03	0.05	0.07	0.02	0.03	ND	0.03	0.03	0.02	0.02	0.05	0.03	0.01	ND	0.02	ND	ND	ND	0.21	ND	ND	ND	ND	0.02	0.01	0.03
③	–	–	–	0.01	0.01	0.05	ND	0.02	0.03	ND	ND	ND	0.04	ND	0.02	0.009	0.03	ND	0.01	ND	ND	ND	0.01	ND	ND	0.01	ND	0.15
④	0.04	–	0.02	–	–	–	–	–	–	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
⑤	0.45	0.3	0.19	0.07	0.09	0.1	0.07	0.08	0.15	0.05	0.05	0.07	0.07	0.05	0.06	0.062	0.08	0.05	0.04	0.04	0.06	0.06	0.09	0.06	0.1	0.1	0.09	0.12
⑥	–	–	–	–	–	–	–	–	–	–	-	-	-	ND	-	-	0.03	-	-	-	-	-	-	0.04	-	-	-	-

Cs-137(Bq/cm^3)

Place of sampling	Before transfer				After transfer																							
	4/16	4/17	4/18	4/19	4/20	4/21	4/22	4/23	4/24	4/25	4/26	4/27	4/28	4/29	4/30	5/1	5/2	5/3	5/4	5/5	5/6	5/7	5/8	5/9	5/10	5/11	5/12	5/13
①	–	0.11	0.09	0.1	0.1	0.51	–	0.24	0.16	0.13	0.12	0.13	0.23	0.13	0.17	0.078	0.11	0.15	0.09	0.1	0.05	0.03	0.07	0.05	0.11	0.05	0.05	0.17
②	ND	0.04	0.03	0.04	0.07	0.04	0.03	0.02	0.02	0.03	0.02	0.03	0.03	0.02	0.01	ND	0.03	0.02	0.02	ND	0.23	ND	ND	0.01	ND	ND	0.01	0.03
③	–	–	–	ND	0.02	0.04	0.02	ND	0.03	0.01	ND	0.02	0.03	ND	0.02	0.008	0.03	ND	0.01	ND	ND	ND	ND	ND	0.01	0.02	0.03	0.15
④	0.03	–	0.01	–	–	–	–	–	–	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
⑤	0.45	0.32	0.21	0.08	0.08	0.1	0.08	0.08	0.15	0.06	0.05	0.08	0.07	0.07	0.04	0.047	0.09	0.05	0.06	0.04	0.06	0.07	0.1	0.05	0.12	0.1	0.1	0.12
⑥	–	–	–	–	–	–	–	–	–	–	-	-	-	ND	-	-	0.04	-	-	-	-	-	-	0.02	-	-	-	-

* Hyphen "–" indicates that neither sampling nor measurements were implemented.
* Data on April 19 was treated as one before transfer since it was sampled just two hours after transfer so that small amout of water was transferred to the Process Main Building.
* Sampling at Southwest part of the Process Main Building (④) was conducted once a week upto April 25 since it is located upper side of the groundwater.
* Sampling at Southwest part of the On-site Bunker Building (⑥) was conducted as upper side of the groundwater once a week from April 29 since it turned unable to sample at Southwest of the Process Main Building (④).

<Place of sampling>
①Southeast part of Unit 4 Turbine Building
②Northeast part of Process Main Building
③Southeast part of Process Main Building
④Southwest part of Process Main Building
⑤South part of Miscellaneous Solid Waste Volume Reduction Treatment Building
⑥Southwest part of On-site Bunker Building

Reference
June 19, 2011

Results of Nuclide Analyses of Sub-drain Water nearby Centralized Radiation Waste Treatment Facility (2/3)

I-131(Bq/cm^3)

Place of sampling	After transfer																											
	5/14	5/15	5/16	5/17	5/18	5/19	5/20	5/21	5/22	5/23	5/24	5/25	5/26	5/27	5/28	5/29	5/30	5/31	6/1	6/2	6/3	6/4	6/5	6/6	6/7	6/8	6/9	6/10
①	0.21	0.06	0.04	ND	0.01	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.23	0.35	0.08	0.05	0.23	0.03	0.08	0.12	0.02	0.01	0.1	0.01
②	0.04	0.04	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	ND	0.02	0.02	0.02	0.01	0.01	ND	0.01	ND	0.01	ND	0.01	0.01
③	0.02	ND	0.03	0.01	ND	0.01	0.01	ND	0.01	0.01	ND	ND	ND	ND	0	0.006	0.04	0.01	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND
④	-	-	-	-	-	–	-	-	–	–	–	–	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
⑤	0.06	0.05	0.05	0.04	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.041	0.02	ND	0.02	0.01	0.01	ND	0.01	ND	ND	0.01	0.01	0.01
⑥	-	-	0.01	–	–	–	-	-	–	0.01	-	-	-	-	-	-	0.01	-	-	-	-	-	-	ND	-	-	-	-
⑦	-	-	-	–	–	–	-	-	–	-	-	-	0.16	0.14	0.11	0.12	0.14	0.05	0.04	0.05	0.09	0.04	0.04	0.03	0.02	0.04	0.02	0.02
⑧	-	-	-	–	–	–	-	-	–	-	-	-	-	-	-	-	0.01	0.02	0.01	0.01	0.02	ND	0.01	ND	0.01	ND	ND	ND

Cs-134(Bq/cm^3)

Place of sampling	After transfer																											
	5/14	5/15	5/16	5/17	5/18	5/19	5/20	5/21	5/22	5/23	5/24	5/25	5/26	5/27	5/28	5/29	5/30	5/31	6/1	6/2	6/3	6/4	6/5	6/6	6/7	6/8	6/9	6/10
①	2.6	0.11	0.08	0.06	0.06	0.08	0.05	0.06	0.07	0.05	0.06	0.02	0.03	0.04	0.06	0.024	0.15	0.18	0.95	0.07	0.16	0.06	0.08	0.1	0.07	0.03	0.13	0.04
②	0.02	ND	0.01	ND	ND	0.01	0.03	ND	ND	ND	ND	ND	0.01	0.01	ND	0.022	0.03	ND	ND	0.01	0.01	ND	ND	ND	0.01	ND	ND	0.01
③	0.02	ND	0.1	ND	ND	ND	0.03	ND	0.01	0.01	ND	ND	ND	0.02	0.01	0.01	0.11	0.02	ND	ND	0.01	0.01	ND	ND	ND	ND	ND	ND
④	-	-	-	-	-	–	-	-	–	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
⑤	0.13	0.12	0.13	0.13	0.15	0.13	0.14	0.11	0.14	0.12	0.13	0.12	0.13	0.12	0.14	0.19	0.13	0.03	0.06	0.06	0.06	0.04	0.06	0.04	0.08	0.12	0.11	0.05
⑥	-	-	0.01	–	–	–	-	-	–	ND	-	-	-	-	-	-	0.08	-	-	-	-	-	-	ND	-	-	-	-
⑦	-	-	-	–	–	–	-	-	–	-	-	-	0.33	0.41	0.44	0.67	0.9	0.81	0.77	0.74	0.5	0.68	0.81	0.72	0.64	0.64	0.61	0.55
⑧	-	-	-	–	–	–	-	-	–	-	-	-	-	-	-	-	0.07	0.09	0.06	0.05	0.06	0.04	0.07	0.04	0.03	0.04	0.05	0.05

Cs-137(Bq/cm^3)

Place of sampling	After transfer																											
	5/14	5/15	5/16	5/17	5/18	5/19	5/20	5/21	5/22	5/23	5/24	5/25	5/26	5/27	5/28	5/29	5/30	5/31	6/1	6/2	6/3	6/4	6/5	6/6	6/7	6/8	6/9	6/10
①	2.9	0.13	0.09	0.08	0.05	0.1	0.06	0.05	0.06	0.05	0.06	0.03	0.05	0.04	0.07	0.028	0.16	0.21	1	0.1	0.17	0.06	0.1	0.12	0.08	0.04	0.13	0.06
②	0.02	ND	0.01	ND	ND	ND	0.02	0.01	0.02	ND	ND	ND	0.02	0.01	ND	ND	ND	0.03	ND	0.01	0.01	ND	ND	ND	0.01	ND	ND	ND
③	ND	0.03	0.1	ND	ND	ND	0.03	ND	ND	ND	0.01	ND	ND	0.01	ND	0.015	0.13	ND	ND	0.01	0.01	ND	ND	ND	ND	ND	ND	ND
④	-	-	-	-	-	–	-	-	–	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
⑤	0.12	0.13	0.12	0.12	0.14	0.13	0.14	0.12	0.13	0.13	0.14	0.12	0.13	0.12	0.16	0.21	0.13	0.03	0.06	0.08	0.07	0.05	0.09	0.06	0.09	0.13	0.13	0.05
⑥	-	-	0.01	–	–	–	-	-	–	ND	-	-	-	-	-	-	0.08	-	-	-	-	-	-	ND	-	-	-	-
⑦	-	-	-	–	–	–	-	-	–	-	-	-	0.35	0.43	0.46	0.72	0.95	0.84	0.85	0.77	0.51	0.72	0.85	0.78	0.73	0.69	0.67	0.59
⑧	-	-	-	–	–	–	-	-	–	-	-	-	-	-	-	-	0.08	0.1	0.06	0.07	0.07	0.04	0.07	0.05	0.03	0.05	0.05	0.05

* Hyphen "–" indicates that neither sampling nor measurements were implemented.
* Data on April 19 was treated as the one before transfer since it was sampled just two hours after transfer so that small amout of water was transferred to the Process Main Building.
* Sampling at Southwest part of the Process Main Building (④) was conducted once a week upto April 25 since it is located at upstream of the groundwater.
* Sampling at Southwest part of the On-site Bunker Building (⑥) was conducted as upstream of the groundwater once a week from April 29 since it was unable to sample at Southwest of the Process Main Building (④).
* Additional sampling at ⑦ was conducted since it is located at thd downstream of the groundwater.
* We have been sampling at ⑧ since May 30.

<Place of sampling>
①Southeast part of Unit 4 Turbine Building
②Northeast part of Process Main Building
③Southeast part of Process Main Building
④Southwest part of Process Main Building
⑤South part of Miscellaneous Solid Waste Volume Reduction Treatment Building
⑥Southwest part of On-site Bunker Building
⑦West part of Incineration Workshop Building
⑧North part of Miscellaneous Solid Waste Volume Reduction Treatment Building

Reference
June 19, 2011

Results of Nuclide Analyses of Sub-drain Water nearby Centralized Radiation Waste Treatment Facility (3/3)

I-131(Bq/cm^3)

Place of sampling	After transfer							
	6/11	6/12	6/13	6/14	6/15	6/16	6/17	6/18
①	0.007	ND	0.007	0.033	ND	0.016	0.009	ND
②	ND	ND	0.005	ND	ND	ND	0.004	ND
③	ND	ND	ND	ND	ND	ND	ND	ND
④	-	-	-	-	-	–	–	–
⑤	ND	ND	0.011	ND	ND	ND	ND	ND
⑥	-	-	0.004	-	-	–	-	–
⑦	0.034	ND	0.021	ND	ND	0.029	ND	ND
⑧	0.004	0.006	0.006	ND	ND	ND	ND	ND

Cs-134(Bq/cm^3)

Place of sampling	After transfer							
	6/11	6/12	6/13	6/14	6/15	6/16	6/17	6/18
①	0.047	0.024	0.02	0.055	0.029	0.027	0.023	ND
②	ND	ND	0.01	0.009	ND	ND	ND	ND
③	ND	ND	ND	ND	ND	ND	ND	ND
④	-	-	-	-	-	–	–	–
⑤	0.037	0.043	0.13	0.037	0.048	0.03	0.028	0.028
⑥	-	-	0.01	-	-	–	–	–
⑦	0.29	0.59	0.2	0.54	0.37	0.41	0.66	0.69
⑧	0.043	0.068	0.043	0.037	0.048	0.038	0.027	0.024

Cs-137(Bq/cm^3)

Place of sampling	After transfer							
	6/11	6/12	6/13	6/14	6/15	6/16	6/17	6/18
①	0.045	0.022	0.024	0.066	ND	0.043	0.022	ND
②	ND	ND	ND	0.011	ND	ND	ND	ND
③	ND	ND	ND	ND	ND	ND	ND	ND
④	-	-	-	-	-	–	–	–
⑤	0.04	0.058	0.15	0.046	0.059	0.026	0.033	0.04
⑥	-	-	0.009	-	-	–	–	–
⑦	0.33	0.64	0.24	0.6	0.4	0.45	0.69	0.79
⑧	0.048	0.068	0.053	0.033	0.037	0.039	0.032	0.025

* Hyphen "-" indicates that neither sampling nor measurements were implemented.
* Data on April 19 was treated as the one before transfer since it was sampled just two hours after transfer so that small amout of water was transferred to the Process Main Building.
* Sampling at Southwest part of the Process Main Building (④) was conducted once a week upto April 25 since it is located at upstream of the groundwater.
* Sampling at Southwest part of the On-site Bunker Building (⑥) was conducted as upstream of the groundwater once a week from April 29 since it was unable to sample at Southwest of the Process Main Building (④).
* ND indicates here that the result was below the detection limits of the radioactivity concentration of these analyses (I-131: approx. 0.02Bq/cm3, Cs-134: approx. 0.02Bq/cm3, and Cs-137: approx. 0.02Bq/cm3) (June 18). The limits differ by the shape of the detector / conditions of samples, so may be detected below these figures.

* Additional sampling at ⑦ was conducted since it is located at thd downstream of the groundwater.
* We have been sampling at ⑧ since May 30.

<Place of sampling>
①Southeast part of Unit 4 Turbine Building
②Northeast part of Process Main Building
③Southeast part of Process Main Building
④Southwest part of Process Main Building
⑤South part of Miscellaneous Solid Waste Volume Reduction Treatment Building
⑥Southwest part of On-site Bunker Building
⑦West part of Incineration Workshop Building
⑧North part of Miscellaneous Solid Waste Volume Reduction Treatment Building