(News Release)

The Results of Radioactive Material Monitoring of the Surface Water Bodies within Gunma Prefecture

(May-July Samples)

Friday, August 24, 2012 Water Environment Division, Environment Management Bureau, Ministry of the Environment

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In accordance with the Comprehensive Radiation Monitoring Plan determined by the Monitoring Coordination Meeting, the Ministry of the Environment (MOE) is continuing to monitor radioactive materials in water environments (surface water bodies (rivers, lakes and headwaters, and coasts), etc.).

Samples taken from the surface water bodies of Gunma Prefecture during the period of May 28-July 11, 2012 have been measured as part of MOE's efforts to monitor radioactive materials; the results have recently been compiled and are released here.

The monitoring results of radioactive materials in surface water bodies carried out to date can be found at the following web page: http://www.env.go.jp/jishin/rmp.html#monitoring

1. Survey Overview

(1) Survey Locations

56 environmental reference points, etc. in the surface water bodies within Gunma Prefecture (Rivers: 48 locations, Lakes and headwaters: 8 locations)

- (2) Survey Method
 - Measurement of concentrations of radioactive materials (radioactive cesium (Cs-134 and Cs-137), etc.) in water and sediment
 - Measurement of concentrations of radioactive materials and spatial dose-rate in soil in the surrounding environment of water and sediment sample collection points (river terraces, etc.)
- 2. Outline of Results (* denotes the results of the previous survey (February-March))
 - (1) Water Quality (Lower detection limit: 1Bq/L)

Cs-134, Cs-137: Not detectable (ND) at any location (*ND at any location)

<Reference>

Specification and Standards for Food, Food Additives, etc. in accordance with the Food Sanitation Act (Drinking Water) (Ministry of Health, Labour and Welfare Public Notice No.130, March 15, 2012) Radioactive cesium (total for Cs-134+Cs-137): 10Bq/kg

Target value for radioactive materials in tap water (management target for water supply facilities) (March 5, 2012; 0305 Notice No.1 from the Director of the Water Supply Division, Health Service Bureau, Ministry of Health, Labour and Welfare)

Radioactive cesium (total for Cs-134+Cs-137): 10Bq/kg

(2) Sediment (Lower detection limit: 10Bq/kg (dried mud))

(Rivers)

Cs-134: ND-440Bq/kg (dried mud)

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Cs-137: ND-640Bq/kg (dried mud)
          (*Cs-134: ND-160Bq/kg (dried mud))
          (*Cs-137: ND-250Bq/kg (dried mud))
      (Lakes and headwaters)
         Cs-134: 46-750Bq/kg (dried mud)
         Cs-137: 68-1,200Bq/kg (dried mud)
           (*Cs-134: ND-870Bq/kg (dried mud))
           (*Cs-137: ND-1,100Bq/kg (dried mud))
(3) Surrounding Environment ((Lower detection limit: 10Bq/kg (dry))
      (Rivers)
         Cs-134: ND-1,700Bq/kg (dry)
         Cs-137: 17-2,600Bq/kg (dry)
           (*Cs-134: 16-2,300Bq/kg (dry))
           (*Cs-137: 22-3,300Bq/kg (dry))
        Spatial dose: 0.04-0.38µSv/h
      (Lakes and headwaters)
         Cs-134: 84-780Bq/kg (dry)
         Cs-137: 120-1,200Bq/kg (dry)
           (*Cs-134: 40-430Bq/kg (dry))
           (*Cs-137: 73-610Bq/kg (dry))
       Spatial dose: 0.04-0.34µSv/h
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(Annex for details) (Map attached)

Future Plans

In coordination with relevant organizations, MOE intends to continue to measure radioactive materials in water, sediment, etc. in rivers, lakes, etc. in Fukushima Prefecture, its neighboring prefectures, etc.

ORiver: Water Quality Monitoring Results

(Annex)

| | Summing noise | | | | | | | | | General items | | | ration of radioactive mate | 1 t D 4 | (i iiiiex) | |
|--------------|---------------|------------------------|--|---|------------------------|-----------------|--------------|----------------|--------------|----------------------------|-------------|--------------------|----------------------------|-------------|---|--|
| | | | Sampling point | | | | Full depth | | | General items | | Concern | ration of radioactive mate | enai Bq/L | | |
| No | | Water body | Point | Municipality | Sampling date | Weather | m | Sampling depth | Transparency | Electrical conductivity SS | Turbidity | Radioactive iodine | Radioac | tive cesium | Remarks | |
| NO. | | water body | rom | Numerpanty | | | | m | cm | mS/m mg/L | | I-131 | Cs-134 | Cs-137 | | |
| 1 | | | Hirosebashi Bridge | | 2012/5/30 | Sunny | 1.40 | 0.0 | 20 | 3 | d 1 | <1 | <1 | <1 | | |
| | | Tonegawa River | | | | | | 0.0 | 45 | 3 | -1 | ~1 | ~1 | ~1 | _ | |
| 2 | т. | _ | Tsukiyonobashi Bridge | Minakamimachi Town | 2012/5/30 2012/7/10 | Sunny | 0.60 | 0.0 | 45 58 | | 1 1 | S1 | <1 | <1 | + | |
| 3 | 1 | Akayagawa River | Kosodebashi Bridge | | 2012/5/30 | Sunny | 0.50 | 0.0 | >100 | | d d | | <1 | | | |
| - | o n | | In Ooaza Yachi | Kawabamura Village | 2012/5/30 | Sunny | 0.40 | 0.0 | >100 | | 1 1 | <1 | <1 | <1 | 1 | |
| * | | Sakuragawa River | in Ooaza 1 acm | Kawaoamura vinage | 2012/7/9 | Sunny | 0.60 | 0.0 | 100 | 5 | 2 <1 | <1 | <1 | <1 | | |
| 5 | e | | Kirinokibashi Bridge | Katashinamura Village | 2012/5/30 | Sunny | 0.10 | | >100 | | 3 1 | <1 | <1 | <1 | | |
| 6 | a a | W . 1: P: | Tonemachitakatoya | Numatashi City | 2012/5/31 | Sunny | 0.60 | 0.0 | >100 | | 4 1 | <1 | <1 | <1 | _ | |
| т т | w | Katashinagawa River | | | 2012/7/10 2012/5/29 | Sunny | 0.40 2.10 | 0.0 | >100 | | 2 <1 | - SI | <1 | <1 | | |
| 7 . | a | | Futaebashi Bridge | Numatashi City/Showamura Village | 2012/7/10 | Sunny | 1.20 | | 27 | | 7 2 | <1 | <1 | <1 | + | |
| 9 n | a | Agatsumagawa River | Shintobashi Bridge | Naganoharamachi Town | 2012/5/29 | Cloudy | 0.50 | 0.0 | 20 | 23 | 14 7 | - 4 | - 1 | <1 | 1 | |
| 8 11 | | | - | | 1 | | | | >100 | | / | ~1 | ~1 | ~1 | , | |
| 9 0 | | Shirasunagawa River | Shuttatsubashi Bridge | Nakanojomachi Town | 2012/6/11 2012/5/30 | Cloudy | 1.50 0.50 | 0.0 | >100 | 19 | 1 1 | <1 | <1 | <1 | | |
| 10 g | 1 | Agatsumagawa River | Downstream of Azumabashi Bridge | Higashiagatsumamachi Town | 2012/5/30 | Sunny | 0.50 | 0.0 | 40 | | 10 7 | SI | <1 | | + | |
| 11 w | R | Nakutagawa River | Tonodabashi Bridge | Takayamamura Village | 2012/7/10 | Sunny | 0.20 | 0.0 | >100 | | 2 1 | <1 | <1 | <1 | | |
| 12 9 | i | Agatsumagawa River | Agatsumabashi Bridge | | 2012/5/29 | Cloudy | 0.50 | 0.0 | 52 | | 3 2 | <1 | <1 | <1 | † | |
| 12 a | v | Agaisanagawa River | Agaisunattisti Driuge | Shibukawashi City | 2012/6/27 | Sunny | 0.40 | | 80 | 19 | 4 2 | <1 | <1 | <1 | | |
| 13 | e | Tonegawa River | Taishobashi Bridge | Cny | 2012/5/29 | Cloudy | 1.40 | 0.0 | >100 | 5 | 4 1 | <1 | <1 | <1 | | |
| | r | - | | N. 1: 1 1: W | 2012/6/26 | Sunny | 0.20 | 0.0 | 65 | | 2 1 | <1 | <1 | | · · | |
| 14 | | Takizawagawa River | Shintakizawabashi Bridge Gunmaohashi Bridge | Yoshiokamachi Town Maebashishi City | 2012/6/7 | Sunny | 0.20 0.10 | 0.0 | 93 91 | | 4 2 | <1 | <1 | <1 | | |
| 15 | | Tonegawa River | Fukushimabashi Bridge | Maetashishi City Tamamuramachi Town | 2012/6/7 | Cloudy | 0.10 | 0.0 | 91 | | 3 1 | - SI | <1 | -1 | • 1 | |
| 10 | | t | | ramamuramaciii rowii | | | | | | 12 | | | ~1 | | | |
| 17 | | Nagaigawa River | Kamigondabashi Bridge | Takasakishi City | 2012/6/6 | Cloudy | 0.40 | 0.0 | >100 | 11 | 3 1 | <1 | <1 | <1 | | |
| 18 | K | Karasugawa River | Karasugawabashi Bridge | | 2012/6/6 | Cloudy | 0.20 | 0.0 | >100 | | 2 1 | <1 | <1 | | | |
| 19 | a | Usuigawa River | Nakasebashi Bridge | Annakashi City | 2012/6/6 | Rain | 0.20 | 0.0 | 62 | | 3 1 | <1 | <1 | | | |
| 20 | r | | Hanatakabashi Bridge | Takasakishi City | 2012/6/6 | Cloudy | 0.20 | | 66 | | 6 2 | <1 | <1 | | | |
| 21 R | R | Kaburagawa River | Tadakawabashi Bridge Kaburagawabashi Bridge | Tomiokashi City/Shimonitamachi Town Takasakishi City/Fujiokashi City | 2012/6/4 | Sunny Cloudy | 0.25 0.25 | 0.0 | >100 | | 2 1 | <1 | <1 | -1 | | |
| 22 i | i " | Ogawa River | Kaburagawatasni Bridge Kinzanbashi Bridge | Kanramachi Town | 2012/6/13 | Cloudy | 0.25 | | >100 | | 3 3 (I I | | <1 | | | |
| 2.4 V | v | Nanmokugawa River | Ozawabashi Bridge | Nanmokumura Village | 2012/6/13 | Cloudy | 0.25 | 0.0 | >100 | | 4 1 | | <1 | | | |
| 25 e | e | Someyagawa River | Yakushibashi Bridge | Shintomura Village | 2012/6/8 | Sunny | 0.20 | 0.0 | 78 | | 4 2 | <1 | <1 | <1 | <u> </u> | |
| 26 r | r g | Inogawa River | Kamakurabashi Bridge | | 2012/6/6 | Cloudy | 0.20 | 0.0 | 31 | | 12 3 | <1 | <1 | < | <u> </u> | |
| 27 | a | Karasugawa River | Iwakurabashi Bridge | Takasakishi City | 2012/6/7 | Sunny | 0.30 | 0.0 | >100 | 36 | 3 1 | <1 | <1 | <1 | <u> </u> | |
| 28 | w | | Shinkanamebashi Bridge | Uenomura Village | 2012/6/13 | Cloudy | 0.25 | 0.0 | >100 | 13 | <1 1 | <1 | <1 | <1 | İ | |
| 29 | a | Kannagawa River | Moritobashi Bridge | Kannamachi Town | 2012/6/4 | Sunny | 0.50 | 0.0 | >100 | 15 | <1 <1 | <1 | <1 | <1 | | |
| 30 | | Kamagawa Kivei | Tobukyo Bridge | Fujiokashi City/Kamikawamachi Town | 2012/6/5 | Cloudy | 0.10 | 0.0 | >100 | 23 | 2 | <1 | <1 | <1 | | |
| 31 | | | Kannagawabashi Bridge | Kamisatomachi Town | 2012/6/13 | Cloudy | 0.40 | 0.0 | >100 | 18 | 4 1 | <1 | <1 | <1 | | |
| 32 | т | Tonegawa River | Bandoohashi Bridge | Honjoshi City | 2012/6/5 | Cloudy | 0.10 | 0.0 | 65 | 20 | 3 | <1 | <1 | <1 | | |
| 33 | 1 | Akagishirakawa River | In Shimohosoimachi Town | 1 | 2012/6/8 | Sunny | 0.40 | 0.0 | 48 | 21 | 8 3 | <1 | <1 | <1 | + | |
| 34 | R o | Momonokigawa River | Utsuboibashi Bridge | Maebashishi City | 2012/6/7 | Sunny | 0.30 | | 52 | | 4 2 | <1 | <1 | <1 | + | |
| 35 | i n | Aratogawa River | Okuharabashi Bridge | 1 | 2012/6/7 | - | - 0.50 | - | | | - | - | | - " | Unable to collect samples due to river construction | |
| 36 | v e | Kasukawa River | Hozumibashi Bridge | İ | 2012/6/5 | Cloudy | 0.20 | 0.0 | 54 | 25 | 6 2 | <1 | <1 | <1 | | |
| 37 S | e g | Hirosegawa River | Nakajimabashi Bridge | Isesakishi City | 2012/6/5 | Cloudy | 0.20 | 0.0 | 55 | 23 | 9 4 | <1 | <1 | <1 | | |
| 38 v | r a | Hayakawa River | Hayakawabashi Bridge | | 2012/6/12 | Cloudy | 0.20 | 0.0 | 39 | 15 | 3 2 | <1 | <1 | <1 | | |
| 39 | w | They was the Televille | Maejimabashi Bridge | Otashi City | 2012/6/12 | Light rain | 0.20 | 0.0 | 53 | 25 | 6 2 | <1 | <1 | <1 | | |
| 40 + | a | Tonegawa River | Toneozeki Weir | Chiyodamachi Town/Gyodashi City | 2012/5/28 | Sunny | 0.45 | | 32 | | 19 5 | <1 | <1 | <1 | | |
| ⊢ | <u> </u> | | ļ | | 2012/7/11 | Sunny | 0.60 | 0.0 | 34 >100 | | 12 3 | <1 | <1 | <1 | | |
| 41 m | a W | Kogurogawa River | Kayanobashi Bridge | Kiryushi City | 2012/5/29 2012/7/11 | Sunny | 0.90 | 0.0 | >100 >100 | | 1 1 | <1 | <1 | | · · | |
| 42 | w a | | Takatsudo | Midorishi City | 2012///11 | Cloudy | 0.60 | | >100 | | 3 1 | | <1 | | | |
| 42 | a t | Watarasegawa River | | | 2012/5/28 | Cloudy | 0.80 | 0.0 | >100 | | 1 1 | <1 | <1 | | + | |
| 43 | a | | Intake for Akaiwayosui water channel | Kiryushi City | 2012/7/11 | Sunny | 0.50 | | 97 | | 1 <1 | <1 | <1 | <1 | <u> </u> | |
| 44 | R r | Tataragawa River | Ejiribashi Bridge | Ouramachi Town | 2012/6/14 | Cloudy | 0.15 | | 53 | 19 | 3 1 | <1 | <1 | <1 | 1 | |
| 45 | i a | | Kannonbashi Bridge | | 2012/6/12 | Cloudy | 0.25 | 0.0 | >100 | 6 | <1 1 | <1 | <1 | <1 | | |
| ⊢ | v s | Kiryugawa River | | Kiryushi City | 2012/5/28 | Rain | 0.55 | | 39 | · · | 4 2 | + | - 4 | | 1 | |
| 46 | | 1 | Sakaibashi Bridge | 1 | 2012/5/28 | Rain | 0.55 | 0.0 | >100 | | 8 2 | <1 | <1 | ~1 | | |
| 47 | e e | Tsuruudagawa River | Jonuma Lake | Tatebayashishi City | 2012/7/11 | Cloudy | 2.00 | | >100 35 | | 7 3 | <1 | <1 | | | |
| 48 | r g | Yatagawa River | Togodabashi Bridge | Meiwamachi Town | 2012/6/14 | Cloudy | 0.20 | 0.0 | 51 | 33 | 8 3 | 4 | 4 | <1 | + | |
| 0.0.0 | on points for | | uth, and for different points along the river, fro | | | | | - | | | | | | • | <u>+</u> | |

ORiver: Sediment Monitoring Results

| | Sampling point | | | | | Weather | Full depth | | General items | | Concentration of | radioactive material Bq | /kg (dried mud) | |
|-------------|----------------|-------------------------------------|--|---|------------------------|----------------------|--------------|--------------------|---------------|--------------|-----------------------------|-------------------------|----------------------|--|
| No. | | Water body | Point | Municipality | Sampling date | Weather | m | Mud sampling depth | Mud content | Property | Radioactive iodine I-131 | Radioact Cs-134 | ive cesium Cs-137 | Remarks |
| 1 | | | Hirosebashi Bridge | | 2012/5/30 | Sunny | 1.40 | em 5 | % 70 | Sand | F131 <30 | Cs-154 | 220 | |
| - | | Tonegawa River | | Minakamimachi Town | 2012/5/30 | Sunny | 0.60 | 5 | 87 | Sand | <30 | 39 | 63 | |
| - 2 | | | Tsukiyonobashi Bridge | | 2012/7/10 | Sunny | 0.70 | | 95 | Sand | <30 | 13 | 24 | |
| 3 | T | Akayagawa River | Kosodebashi Bridge | | 2012/5/30 | Sunny | 0.50 | | | Sand | <30 | 28 | 40 | |
| 4 | o | Sakuragawa River | In Ooaza Yachi | Kawabamura Village | 2012/5/30 2012/7/9 | Sunny Sunny | 0.40 | | 79 87 | Sand Sand | <30 | 160 | 250 150 | |
| 5 | n | | Kirinokibashi Bridge | Katashinamura Village | 2012/5/30 | Sunny | 0.10 | | 91 | Sand | <30 | 14 | 24 | |
| 6 | e | | Tonemachitakatoya | Numatashi City | 2012/5/31 | Sunny | 0.60 | | 94 | Sand | <30 | <10 | <10 | |
| | g | Katashinagawa River | | | 2012/7/10 | Sunny | 0.40 | 3 | 89 | Sand | <30 | <10 | 10 | |
| 7 T | a w | | Futaebashi Bridge | Numatashi City/Showamura Village | 2012/5/29 | Sunny | 2.10 | 5 | 92 | Sand | <30 | 17 | 22 | |
| , , | a | | i daeousii Dridge | Transaction City/Olovaniaa Village | 2012/7/10 | Sunny | 1.20 | 2 | 83 | Sand | <30 | 32 | 54 | |
| o n | _ | Agatsumagawa River | Shintobashi Bridge | Naganoharamachi Town | 2012/5/29 | Cloudy | 0.50 | | 92 | Sand | <30 | <10 | 11 | |
| 0 e | | Shirasunagawa River | Shuttatsubashi Bridge | Nakanojomachi Town | 2012/6/11 | Cloudy | 1.50 | , | 72 | Saliu | - 30 | -10 | - " | Unable to collect sediment as steep cliffs at both sides of the river prevented us to get down to the river. |
| g | | Sili asuliagawa Kivei | Siluttatsubasii Bridge | ivakanojonaciii 10wii | 2012/5/30 | | 0.50 | | 92 | | <30 | - 10 | | Chable to conect seament as steep chirs at both sides of the river prevented as to get down to the river. |
| 10 a | | Agatsumagawa River | Downstream of Azumabashi Bridge | Higashiagatsumamachi Town | | Sunny | | 3 | | Sand | | <10 | 11 | |
| w | R | | | | 2012/7/10 | Sunny | 0.20 | 2 | 92 | Sand | <30 | 10 | 12 | |
| 11 a | i | Nakutagawa River | Tonodabashi Bridge | Takayamamura Village | 2012/6/15 | Sunny | 0.20 | 3 | 85 | Sand | <30 | 47 | 86 | |
| 12 | v | Agatsumagawa River | Agatsumabashi Bridge | 1 | 2012/5/29 2012/6/27 | Cloudy Sunny | 0.50 | 5 | 88 92 | Sand Sand | <30 | 17 | 36 | |
| | e | | | Shibukawashi City | 2012/6/27 | Cloudy | 1.40 | | 92 | Sand Sand | <30 | <10 | 19 | |
| 13 | r | Tonegawa River | Taishobashi Bridge | | 2012/6/26 | Sunny | 0.20 | 3 | 92 | Sand | <30 | 17 | 32 | |
| 14 | | Takizawagawa River | Shintakizawabashi Bridge | Yoshiokamachi Town | 2012/6/7 | Sunny | 0.20 | 3 | 92 | Sand | <30 | 30 | 50 | |
| 15 | | Tonegawa River | Gunmaohashi Bridge | Maebashishi City | 2012/6/7 | Sunny | 0.10 | 2 | 86 | Sand | <30 | 26 | 38 | |
| 16 | | | Fukushimabashi Bridge | Tamamuramachi Town | 2012/6/7 | Cloudy | 0.30 | 5 | 89 | Sand | <30 | 16 | 28 | |
| 17 | | Nagaigawa River | Kamigondabashi Bridge | Tamamuramachi Town Takasakishi City Annakashi City Takasakishi City | 2012/6/6 | Cloudy | 0.40 | 4 | 88 | Sand | <30 | 120 | 190 | |
| 18 | К | Karasugawa River | Karasugawabashi Bridge | | 2012/6/6 | Cloudy | 0.20 | 5 | 86 | Sand | <30 | 20 | 32 | |
| 19 | | Usuigawa River | Nakasebashi Bridge | | 2012/6/6 | Rain | 0.20 | | 85 | Sand | <30 | 140 | 230 | |
| 20 R | r | | Hanatakabashi Bridge | | 2012/6/6 | Cloudy | 0.20 | | 84 | Sand | <30 | 29 | 45 | |
| 21 i | R ° | Kaburagawa River | Tadakawabashi Bridge | Tomiokashi City/Shimonitamachi Town | 2012/6/4 | Sunny | 0.25 | | 91 | Sand | <30 | 23 | 33 | |
| 22 v | i " | Ogawa River | Kaburagawabashi Bridge Kinzanbashi Bridge | Takasakishi City/Fujiokashi City Kanramachi Town | 2012/6/5 2012/6/13 | Cloudy Cloudy | 0.25 0.25 | | | Sand Sand | <30 | 19 | 23 | |
| 24 e | v | Nanmokugawa River | Ozawabashi Bridge | Nanmokumura Village | 2012/6/13 | Cloudy | 0.25 | | | Sand | <30 | 20 | 39 | |
| 25 r | e u | Someyagawa River | Yakushibashi Bridge | Shintomura Village | 2012/6/8 | Sunny | 0.20 | | 85 | Sand/mud | <30 | 45 | 68 | |
| 26 | r g | Inogawa River | Kamakurabashi Bridge | | 2012/6/6 | Cloudy | 0.20 | | 77 | Mud | <30 | 56 | 69 | |
| 27 | а | Karasugawa River | Iwakurabashi Bridge | Takasakishi City | 2012/6/7 | Sunny | 0.30 | | 62 | Mud/sand | <30 | 40 | 61 | |
| 28 | w | | Shinkanamebashi Bridge | Uenomura Village | 2012/6/13 | Cloudy | 0.25 | | | | <30 | 14 | 23 | |
| 29 | a | Kannagawa River | Moritobashi Bridge | Kannamachi Town | 2012/6/4 | Sunny | 0.50 | | | Sandy | <30 | <10 | <10 | |
| 30 | | Ramagawa River | Tobukyo Bridge | Fujiokashi City/Kamikawamachi Town | 2012/6/5 | Cloudy | 0.10 | | 93 | Sand | <30 | <10 | <10 | |
| 31 | | | Kannagawabashi Bridge | Kamisatomachi Town | 2012/6/13 | Cloudy | 0.40 | 5 | 90 | Sand | <30 | <10 | 14 | |
| 32 | Т | Tonegawa River | Bandoohashi Bridge | Honjoshi City | 2012/6/5 | Cloudy | 0.10 | 10 | 78 | Mud | <30 | 35 | 58 | |
| 33 | R o | Akagishirakawa River | In Shimohosoimachi Town | | 2012/6/8 | Sunny | 0.40 | 4 | 86 | Sand | <30 | 15 | 25 | |
| 34 | R | Momonokigawa River | Utsuboibashi Bridge | Maebashishi City | 2012/6/7 | Sunny | 0.30 | 4 | 83 | Sand | <30 | 31 | 44 | |
| 35 | i " | Aratogawa River | Okuharabashi Bridge | | 2012/6/7 | - | | - | - | - | - | - | | Unable to collect samples due to river construction |
| 36 | v a | Kasukawa River | Hozumibashi Bridge | | 2012/6/5 | Cloudy | 0.20 | | | Sand | <30 | 14 | 25 | |
| 37 5 | e b | Hirosegawa River | Nakajimabashi Bridge | Isesakishi City | 2012/6/5 | Cloudy | 0.20 | 4 3 | | Sand | <30 | 26 | 42 | |
| 38 y | r a | Hayakawa River | Hayakawabashi Bridge Maejimabashi Bridge | Otashi City | 2012/6/12 2012/6/12 | Cloudy Light rain | 0.20 0.20 | | | Sand Sand | <30 <30 | 61 | 86 120 | |
| 39 s | w | | | | 2012/5/28 | Sunny | 0.45 | 3 | 67 | Mud | <30 | 160 | 250 | |
| 40 t | a | Tonegawa River | Toneozeki Weir | Chiyodamachi Town/Gyodashi City | 2012/7/11 | Sunny | 0.60 | 5 | 63 | Silt | <30 | 130 | 210 | |
| e | w | 1 | | | 2012/5/29 | Sunny | 0.90 | | 86 | Sand | <30 | 40 | 62 | |
| 41 m | w | Kogurogawa River | Kayanobashi Bridge | Kiryushi City | | - | | , | | | <30 | 40 | 63 | |
| 42 | a t | h | Takatsudo | Midorishi City | 2012/7/11 | Sunny Cloudy | 0.60 | 3 10 | 87 | Sand Sand | <30 | 54 | 82 | |
| 42 | a | Watarasegawa River | | | 2012/5/28 | Cloudy | 0.80 | | | Sand | <30 | 32 | 50 | |
| 43 | | | Intake for Akaiwayosui water channel | Kiryushi City | 2012/7/11 | Sunny | 0.50 | 3 | | Sand | <30 | 23 | 46 | |
| 44 | R r | Tataragawa River | Ejiribashi Bridge | Ouramachi Town | 2012/6/14 | Cloudy | 0.15 | 5 | 56 | Mud | <30 | 240 | 390 | |
| 45 | i a | | Kannonbashi Bridge | · · · · · · · · · · · · · · · · · · · | 2012/6/12 | Cloudy | 0.25 | 4 | 84 | Sand | <30 | 90 | 150 | |
| 46 | v e | Kiryugawa River | Caladhashi Daidaa | Kiryushi City | 2012/5/28 | Rain | 0.55 | 5 | 94 | Sand | <30 | 49 | 73 | |
| 46 | e e | | Sakaibashi Bridge | 1 | 2012/7/11 | Sunny | 0.40 | | 81 | Sand | <30 | 93 | 150 | |
| 47 | r 5 | Tsuruudagawa River | Jonuma Lake | Tatebayashishi City | 2012/6/14 | Cloudy | 2.00 | | | Mud | <30 | 440 | | |
| 48 | | Yatagawa River | Togodabashi Bridge | Meiwamachi Town | 2012/6/14 | Cloudy | 0.20 | 5 | 58 | Mud | <30 | 250 | 390 | · |
| •Collectio | n points for | rivers are listed from North to Sou | th, and for different points along the river, fron | n upstream to downstream. | | | | | | | | | | |

ORiver: Surrounding Environment Monitoring Results

| Sampling point | | | | | | | | | | Left bank | | | | | Right bank | | | |
|----------------|---------------------------------|------------|---------------------------------------|--|---|------------------------|-----------------|----------------------|---------------------|------------------------|------------|--------------|--------------------|--------------------|----------------------------------|--------------------|---|--|
| | запринд рош | | | | | Sampling date | Weather | | Concentration of ra | dioactive material Bq. | /kg (dry) | Air dose | | Concentration of | radioactive material Bq/kg (dry) | Air dose | Remarks | |
| N. | . Water body Point Municipality | | | Manisimalia | , , | | Property | Radioactive iodine | Radioactive | cesium | μSv/h | Property | Radioactive iodine | Radioactive cesium | μSv/h | | | |
| No. | | , | Water body | Point | Municipality | | | | I-131 | Cs-134 | Cs-137 | роен | | I-131 | Cs-134 Cs-137 | μονι | | |
| 1 | | | m n: | Hirosebashi Bridge | | 2012/5/30 | Sunny | Loamy | <30 | 870 | 1,300 | 0.30 | Loamy | <30 | 460 7 | 20 0.27 | | |
| 2 | | | Tonegawa River | Tsukiyonobashi Bridge | Minakamimachi Town | 2012/5/30 | Sunny | Loamy | <30 | 140 | 210 | 0.14 | | <30 | 410 6 | | | |
| | | T | A h Di | V-sadakashi Daidas | <u>-</u> | 2012/7/10 2012/5/30 | Sunny | Loamy | <30 <30 | 150 390 | 230 620 | 0.13 0.08 | Loamy | <30 <30 | 140 2 | | | |
| - 3 | | 0 | Akayagawa River | Kosodebashi Bridge | 77 1 7779 | 2012/5/30 | Sunny | Loamy Loamy | <30 | 1 100 | 1,600 | 0.08 | | <30 | 140 2 | | | |
| 4 | | n | Sakuragawa River | In Ooaza Yachi | Kawabamura Village | 2012/7/9 | Sunny | Loamy | <30 | 840 | 1,400 | 0.35 | Loamy | <30 | 640 1,0 | | | |
| 5 | | e e | | Kirinokibashi Bridge | Katashinamura Village | 2012/5/30 | Sunny | Loamy | <30 | 210 | 320 | 0.14 | Loamy | <30 | 340 5 | 30 0.16 | | |
| 6 | | a | Katashinagawa River | Tonemachitakatoya | Numatashi City | 2012/5/31 2012/7/10 | Sunny | Sandy Sandy | <30 <30 | 22 | 36 43 | 0.12 | | <30 <30 | 48 340 5 | 83 0.12 50 0.11 | | |
| 7 T | | w | remainingawa reres | Futaebashi Bridge | Numatashi City/Showamura Village | 2012/5/29 | Sunny | Loamy | <30 | 630 | 940 | 0.10 | | <30 | 140 2 | 10 0.10 | | |
| , o | | а | | r utaeoasni bruge | Numatasni City/Snowamura Vitage | 2012/7/10 | Sunny | Loamy | <30 | 350 | 580 | 0.11 | | <30 | 310 4 | 50 0.12 | | |
| 8 n | | | Agatsumagawa River | Shintobashi Bridge | Naganoharamachi Town | 2012/5/29 | Cloudy | Loamy | <30 | 38 | 53 | 0.09 | Loamy | <30 | 140 2 | 10 0.13 | | |
| 9 e | | | Shirasunagawa River | Shuttatsubashi Bridge | Nakanojomachi Town | 2012/6/11 | Cloudy | Loamy | <30 | 110 | 180 | 0.06 | | <30 | 400 6 | | | |
| 10 g | | | Agatsumagawa River | Downstream of Azumabashi Bridge | Higashiagatsumamachi Town | 2012/5/30 2012/7/10 | Sunny | Loamy Sandy | <30 <30 | 890 | 1,400 | 0.29 | | <30 <30 | 100 1 | 50 0.09 52 0.09 | | |
| 11 a | | R | Nakutagawa River | Tonodabashi Bridge | Takayamamura Village | 2012///10 | Sunny | Loamy | <30 <30 | 130 | 390 180 | 0.06 | Loamy | <30 <30 | 220 3 | 50 0.09 | | |
| 12 9 | | i | Agatsumagawa River | Agatsumabashi Bridge | | 2012/5/29 | Cloudy | Loamy | <30 | 360 | 560 | 0.21 | Loamy | <30 | 550 8 | 50 0.11 | | |
| 12 4 | | v | Agaistinagawa Kivei | Agaistinatiasin britage | Shibukawashi City | 2012/6/27 | Sunny | Loamy | <30 | 440 | 630 | 0.12 | | <30 | 400 | 50 0.11 | | |
| 13 | | e | Tonegawa River | Taishobashi Bridge | | 2012/5/29 2012/6/26 | Cloudy Sunny | Loamy Loamy | <30 <30 | 510 | 830 620 | 0.10 | Loamy Loamy | <30 <30 | 480 7 820 1.3 | | | |
| 14 | | r | Takizawagawa River | Shintakizawabashi Bridge | Yoshiokamachi Town | 2012/6/7 | Sunny | Loamy | <30 | 170 | 260 | 0.10 | | <30 | 160 2 | 20 0.07 | | |
| 15 | | | Tonegawa River | Gunmaohashi Bridge | Maebashishi City | 2012/6/7 | Sunny | Loamy | <30 | 11 | 24 | 0.04 | Loamy | <30 | 150 2 | 40 0.08 | | |
| 16 | | | - | Fukushimabashi Bridge | Tamamuramachi Town | 2012/6/7 | Cloudy | Loamy | <30 | 22 | 37 | 0.06 | Loamy | <30 | 44 | 79 0.06 | | |
| 17 | | | Nagaigawa River | Kamigondabashi Bridge | Takasakishi City | 2012/6/6 | Cloudy | Loamy | <30 | 240 | 390 | 0.14 | Loamy | <30 | 970 1,5 | 0.16 | | |
| 18 | | K | Karasugawa River | Karasugawabashi Bridge | 7 | 2012/6/6 | Cloudy | Loamy | <30 | 280 | 450 | 0.12 | Loamy | <30 | 580 9 | | | |
| 19 | | a | Usuigawa River | Nakasebashi Bridge Hanatakabashi Bridge | Annakashi City Takasakishi City | 2012/6/6 | Rain Cloudy | Loamy Loamy | <30 <30 | 200 | 310 320 | 0.15 | | <30 <30 | 330 5 | 10 0.18 00 0.09 | | |
| 20 | | n r | | Tadakawabashi Bridge | Tomiokashi City/Shimonitamachi Town | 2012/6/6 | Sunny | Loamy Sandy/loamy | <30 <30 | 140 | 320 220 | 0.08 | | <30 | 180 2 | | | |
| 22 R | | i a | Kaburagawa River | Kaburagawabashi Bridge | Takasakishi City/Fujiokashi City | 2012/6/5 | Cloudy | Loamy | <30 | 48 | 85 | 0.06 | Loamy | <30 | 28 | 48 0.05 | | |
| 23 | | s s | Ogawa River | Kinzanbashi Bridge | Kanramachi Town | 2012/6/13 | Cloudy | Loamy | <30 | 71 | 110 | 0.07 | | <30 | 110 1 | | | |
| 24 V | | e u | Nanmokugawa River Someyagawa River | Ozawabashi Bridge Yakushibashi Bridge | Nanmokumura Village Shintomura Village | 2012/6/13 | Cloudy | Loamy Loamy | <30 <30 | 240 260 | 370 370 | 0.09 | | <30 <30 | 220 3 310 4 | 40 0.12 70 0.06 | | |
| 26 r | , | r g | Inogawa River | Kamakurabashi Bridge | Takasakishi City | 2012/6/6 | Cloudy | Loamy | <30 | 50 | 76 | 0.05 | | <30 | | 80 0.06 | | |
| 27 | | a | Karasugawa River | Iwakurabashi Bridge | | 2012/6/7 | Sunny | Loamy | <30 | 76 | 110 | 0.06 | | <30 | 100 1 | 50 0.06 | | |
| 28 | | a | | Shinkanamebashi Bridge Moritobashi Bridge | Uenomura Village Kannamachi Town | 2012/6/13 | Cloudy | Loamy | <30 <30 | 180 | 270 130 | 0.09 | | <30 <30 | 120 1 | 50 0.10 17 0.06 | | |
| 30 | | | Kannagawa River | Tobukyo Bridge | Fujiokashi City/Kamikawamachi Town | 2012/6/5 | Cloudy | Loamy Loamy | <30 | 58 | 95 | 0.07 | Loamy | <30 | 45 | 71 0.09 | | |
| 31 | | | | Kannagawabashi Bridge | Kamisatomachi Town | 2012/6/13 | Cloudy | Loamy | <30 | 26 | 43 | 0.06 | | <30 | 31 | 53 0.07 | | |
| 32 | | т | Tonegawa River | Bandoohashi Bridge | Honjoshi City | 2012/6/5 | Cloudy | Loamy | <30 | 120 | 200 | 0.09 | Loamy | <30 | 47 | 73 0.07 | | |
| 33 | | | Akagishirakawa River | In Shimohosoimachi Town | | 2012/6/8 | Sunny | Loamy | <30 | 76 | 120 | 0.07 | Loamy | <30 | 88 1 | 30 0.06 | | |
| 34 | F | R n | Momonokigawa River | Utsuboibashi Bridge | Maebashishi City | 2012/6/7 | Sunny | Loamy | <30 | 100 | 150 | 0.07 | Loamy | <30 | 170 2 | 70 0.07 | | |
| 35 | 1 | e e | Aratogawa River | Okuharabashi Bridge | | 2012/6/7 | Classita | | - 20 | - | - | - | | | | 0.06 | Unable to collect samples due to river construction | |
| 36 37 S | | v g | Kasukawa River Hirosegawa River | Hozumibashi Bridge Nakajimabashi Bridge | Isesakishi City | 2012/6/5 | Cloudy | Loamy Loamy | <30 <30 | 62 | 98 | 0.06 | Loamy Loamy | <30 <30 | 36 | 55 0.06 | | |
| 38 v | | a | Hayakawa River | Hayakawabashi Bridge | | 2012/6/12 | Cloudy | Loamy | <30 | 120 | 180 | 0.06 | | <30 | 85 1 | 50 0.07 | | |
| 39 s | - 1 ' | ·w | науакана кис | Maejimabashi Bridge | Otashi City | 2012/6/12 | Light rain | Loamy | <30 | 62 | 83 | 0.07 | Loamy | <30 | 55 | 78 0.09 | | |
| 40 t | | a | Tonegawa River | Toneozeki Weir | Chiyodamachi Town/Gyodashi City | 2012/5/28 2012/7/11 | Sunny | Loamy Loamy | <30 <30 | 57 180 | 80 280 | 0.08 | Loamy Loamy | <30 <30 | 260 3 130 2 | | | |
| e | - | | | | | 2012/7/11 | Sunny | Loamy | <30 | 130 | 190 | 0.26 | Loamy | <30 | 1,300 2,0 | | | |
| 41 m | | a W | Kogurogawa River | Kayanobashi Bridge | Kiryushi City | 2012/3/29 | Sunny | Leaf mold | <30 | 560 | 930 | 0.25 | | <30 | 1,700 2,6 | | | |
| 42 | | w a a t | | Takatsudo | Midorishi City | 2012///11 | Cloudy | Leaf moid Loamy | <30 | 300 41 | 930 68 | 0.25 | | <30 | 1,700 2,6 | | | |
| 43 | ' | u į | Watarasegawa River | Intake for Akaiwayosui water channel | Kiryushi City | 2012/5/28 | Cloudy | Loamy | <30 | 320 | 460 | 0.11 | | <30 | 57 | 81 0.10 | | |
| 45 | r | R r | | | | 2012/7/11 | Sunny | Loamy | <30 | 98 | 140 | 0.09 | | <30 | 70 1 | 20 0.08 | | |
| 44 | | i a | Tataragawa River | Ejiribashi Bridge Kannonbashi Bridge | Ouramachi Town | 2012/6/14 | Cloudy | Loamy Loamy | <30 | 230 | 350 200 | 0.07 | Loamy Loamy | <30 <30 | 70 1 | 10 0.06 10 0.08 | | |
| 43 | | | Kiryugawa River | Sakaibashi Bridge | Kiryushi City | 2012/5/28 | Rain | Loamy | <30 | 59 | 99 | 0.09 | | <30 | | 10 0.08 | | |
| 46 | | e e | | - | | 2012/7/11 | Sunny | Loamy | <30 | 100 | 140 | 0.07 | Loamy | <30 | 190 3 | 0.08 | | |
| 47 | | r g | Tsuruudagawa River | Jonuma Lake | Tatebayashishi City | 2012/6/14 | Cloudy | Loamy | <30 | 82 | 120 | 0.07 | Loamy | <30 | 100 1 | 50 0.07 | | |
| 48 | | | Yatagawa River | Togodabashi Bridge | Meiwamachi Town | 2012/6/14 | Cloudy | Loamy | <30 | 82 | 120 | 0.08 | Loamy | <30 | 130 2 | 10 0.08 | | |

[•]Air dose was measured with a survey meter, TCS-171 or TCS-172 of Hitachi-Aloka Medical, Ltd.

[•]Collection points for rivers are listed from North to South, and for different points along the river, from upstream to downstream.

OLake and Headwater: Water Quality Monitoring Results

| | | Sampling point | | Sampling date | Weather | Full depth | | | General items | | | Concentr | ation of radioactive mater | | Remarks | |
|-----|----------------------------------|-------------------------------------|-------------------------------------|---------------|---------|------------|---------------------|------------------------|---------------------------------|---|-----------|-----------------------------|----------------------------|---------------------|---------|--|
| No. | | Point | | Sampling date | weather | m | Sampling depth m | Secchi disk depth m | Electrical conductivity mS/m | SS mg/L | Turbidity | Radioactive iodine I-131 | Radioacti Cs-134 | ve cesium Cs-137 | RUHRIKS | |
| 1 | Agatsumagawa River Water Body | Tashiroko Lake (Kazawa Dam) | Center Surface layer Lower layer | 2012/6/29 | Sunny | 6.30 | 0.5 5.3 | 1.7 | 8 9 | <1 | 1 | <1 | <1 | <1 | | |
| 3 | w K | Harunako Lake | Center Surface layer Lower layer | 2012/6/28 | Sunny | 14.50 | 0.5 13.5 | 5.8 | 8 10 | <1 3 | 0 | <1 <1 | <1 <1 | <1 <1 | | |
| 3 | t r | Kırızumıko Lake (Kirizumi Dam) | Center Surface laye Lower layer | 2012/6/28 | Cloudy | 10.50 | 0.5 9.5 | 2.4 | 8 8 | <1 <1 | 1 | <1 <1 | <1 | <1 | | |
| 4 | e a r s | Usuiko Lake (Sakamoto Dam) | Center Surface layer Lower layer | 2012/6/27 | Sunny | 13.00 | 0.5 12.0 | 3.3 | 8 | <1 | 0 | <1 | <1 | <1 | | |
| | B e g | Arafuneko Lake (Dodairagawa Dam) | Center Surface layer Lower layer | | Sunny | 26.50 | 0.5 25.5 | 2.5 | 17 44 | <i <i< td=""><td>1</td><td><1 <1</td><td><1 <1</td><td><1</td><td></td></i<></i | 1 | <1 <1 | <1 <1 | <1 | | |
| | o a | Kannako Lake (Shimokubo Dam) | Center Surface laye Lower layer | 2012/6/26 | Sunny | 78.00 | 0.5 77.0 | 2.6 | 14 17 | <1 <1 | 1 | <1 <1 | <1 | <1 | | |
| 1 | y a | Hebikamiko Lake (Shiozawa Dam) | Center Surface laye Lower layer | 2012/6/26 | Sunny | 6.70 | 0.5 5.7 | 1.4 | 6 | 2 | 2 | <1 <1 | <1 <1 | <1 | | |
| 8 | Watarasegawa River Water Body | Umedako Lake (Kiryugawa Dam) | Center Surface layer Lower layer | 2012/6/25 | Rain | 27.00 | 0.5 26.0 | 1.3 | 5 8 | <1 <1 | 1 2 | <1 <1 | <1 | <1 | | |

OLake and Headwater: Sediment and Surrounding Environment (Lake Shore) Monitoring Results

| | | | | | | | | | Sed | iment | | Surrounding environment (lake shore) | | | | | | |
|-----|----------------------------------|----------------------------------|---------------|---------------|------------|-------|--------------------------|------------------|---|---|---------------------|--------------------------------------|------------|-----------------------------|----------------------------|----------------------|----------|---------|
| | | Sampling point | Sampling date | Weather | Full depth | | General items | | Concentration of radioactive material Bq/kg (dried mud) | | | | | Soil | | | Remarks | |
| | | | | Sampling date | weather | m | | | | Concentration of radioscuve material Bq/kg (dried mild) | | | December 1 | | on of radioactive material | | Air dose | Remarks |
| No. | No. Point | | | | | | Mud sampling depth cm | Mud content % | Property | Radioactive iodine I-131 | Radioacti Cs-134 | ve cesium Cs-137 | Property | Radioactive iodine I-131 | Radioact Cs-134 | ive cesium Cs-137 | μSv/h | |
| 1 | Agatsumagawa River Water Body | Tashiroko Lake (Kazawa Dam) | Center | 2012/6/29 | Sunny | 6.30 | 15 | 37 | Mud | <30 | 230 | 310 | Loamy | <30 | 370 | 590 | 0.12 | |
| - 2 | w ĸ | Harunako Lake | Center | 2012/6/28 | Sunny | 14.50 | 15 | 17 | Mud | <30 | 46 | 68 | Loamy | <30 | 780 | 1,200 | 0.34 | |
| 3 | a a t r | Kirizumiko Lake (Kirizumi Dam) | Center | 2012/6/28 | Cloudy | 10.50 | 10 | 46 | Mud | <30 | 310 | 480 | Loamy | <30 | 380 | 580 | 0.13 | |
| 4 | e a i r s | Usuiko Lake (Sakamoto Dam) | Center | 2012/6/27 | Sunny | 13.00 | 10 | 40 | Mud | <30 | 750 | 1,200 | Loamy | <30 | 360 | 550 | 0.14 | |
| 4 | B g | Arafuneko Lake (Dodairagawa Dam) | Center | 2012/6/27 | Sunny | 26.50 | 20 | 52 | Mud | <30 | 130 | 180 | Loamy | <30 | 280 | 410 | 0.12 | |
| | o a d w | Kannako Lake (Shimokubo Dam) | Center | 2012/6/26 | Sunny | 78.00 | 15 | 56 | Mud | <30 | 48 | 80 | Loamy | <30 | 84 | 120 | 0.04 | |
| - | у а | Hebikamiko Lake (Shiozawa Dam) | Center | 2012/6/26 | Sunny | 6.70 | 4 | 62 | Mud | <30 | 260 | 430 | Loamy | <30 | 100 | 160 | 0.09 | |
| 8 | Watarasegawa River Water Body | Umedako Lake (Kiryugawa Dam) | Center | 2012/6/25 | Rain | 27.00 | 10 | 41 | Mud | ⊲30 | 52 | 71 | Loamy | <30 | 190 | 300 | 0.09 | |

⁻ Air dose was measured with a survey meter, TCS-171 or TCS-172 of Hitachi-Aloka Medical, Ltd.

Collection points are listed from North to South.

