### [1] Total Polychlorinated biphenyls (Total PCBs)/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 46/48 (Missing value: 0)
Detection Frequency (sample): 46/48 (Missing value: 0)

	Aggregated value
Geometric mean	110
Median	88
Maximum	3,900
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	110
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(11)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	99
Akita Pref.	4	Lake Hachiro	85
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	37
Fukushima Pref.	6	Onahama Port	120
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	74
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	110
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	56
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	92
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	180
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	2,400
-	13	Mouth of Riv. Sumida (Minato Ward)	3,900
Yokohama City	14	Yokohama Port	550
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	690
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	84
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	170
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	290
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	2,700
Nagano Pref.	20	Lake Suwa (center)	36
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	62
Aichi Pref.	22	Nagoya Port	470
Mie Pref.	23	Yokkaichi Port	110
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	65
Kyoto Pref.	25	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	950
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	540
Osaka City	27	Osaka Port	1,400
Hyogo Pref.	28	Offshore of Himeji	78
Kobe City	29	Kobe Port (center)	480
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	100
Okayama Pref.	31	Offshore of Mizushima	39
Hiroshima Pref.	32	Kure Port	200
	33	Hiroshima Bay	56
Yamaguchi Pref.	34	Tokuyama Bay	83
	35	Offshore of Ube	23
	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	59
Kagawa Pref.		Takamatsu Port	540
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	35
Kitakyushu City	40	Dokai Bay	1,000
Saga Pref.	41	Imari Bay	25
Nagasaki Pref.	42	Omura Bay	16
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	51
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	26
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(8)
2	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	18
Okinawa Pref.	47	Naha Port	200

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) nd: Not detected

<sup>(</sup>Note 4) \*: Indicates the sum value of the Quantification [Detection] limits of each congeners.

### [1-1] Monochlorobiphenyls/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 30/48 (Missing value: 0) Detection Frequency (sample): 30/48 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.6)
Median	tr(0.4)
Maximum	130
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(0.5)
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	0.8
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1.7
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	0.8
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(0.4)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	0.8
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	2.3
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	5.1
•	13	Mouth of Riv. Sumida (Minato Ward)	4.7
Yokohama City	14	Yokohama Port	tr(0.5)
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	1.5
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	130
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(0.3)
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	3.1
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	5.0
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	2.1
Osaka City	27	Osaka Port	1.5
Hyogo Pref.	28	Offshore of Himeji	1.5
Kobe City	29	Kobe Port (center)	2.3
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	0.7
Okayama Pref.	31	Offshore of Mizushima	tr(0.6)
Hiroshima Pref.		Kure Port	tr(0.3)
		Hiroshima Bay	tr(0.3)
Yamaguchi Pref.	34	Tokuyama Bay	18
	35	Offshore of Ube	2.8
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	1.0
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	4.1
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	1.1
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(0.4)
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
1250011111111 1 101.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	tr(0.4)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-2] Dichlorobiphenyls/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 48/48 (Missing value: 0)
Detection Frequency (sample): 48/48 (Missing value: 0)

	Aggregated value
Geometric mean	12
Median	12
Maximum	150
Minimum	tr(0.9)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	19
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(0.9)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	25
Akita Pref.	4	Lake Hachiro	7.3
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	5.8
Fukushima Pref.	6	Onahama Port	27
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	9.8
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	14
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	6.9
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	22
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	18
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	100
,		Mouth of Riv. Sumida (Minato Ward)	120
Yokohama City	14	Yokohama Port	15
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	26
Niigata Pref.	16		3.8
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	13
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	27
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	150
Nagano Pref.		Lake Suwa (center)	2.1
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	15
Aichi Pref.	22	Nagoya Port	61
Mie Pref.	23	Yokkaichi Port	18
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	4.2
Kyoto Pref.		Miyazu Port	1.7
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	130
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	73
Osaka Fiel. Osaka City	27	Osaka Port	110
Hyogo Pref.			
Kobe City	28	Offshore of Himeji	12
•	29	Kobe Port (center)	36
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	18
Okayama Pref.	31	Offshore of Mizushima	8.8
Hiroshima Pref.		Kure Port	5.9
V 1:D C		Hiroshima Bay	4.5
Yamaguchi Pref.	34	Tokuyama Bay	24
	35	Offshore of Ube	5.4
	36	Offshore of Hagi	2.8
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	2.2
Kagawa Pref.	38	Takamatsu Port	29
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	6.9
Kitakyushu City	40	Dokai Bay	29
Saga Pref.	41	Imari Bay	3.6
Nagasaki Pref.	42	Omura Bay	4.9
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	11
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	3.3
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	3.0
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	4.5
Okinawa Pref.	47	Naha Port	11

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

### [1-3] Trichlorobiphenyls/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 46/48 (Missing value: 0)
Detection Frequency (sample): 46/48 (Missing value: 0)

	Aggregated value
Geometric mean	20
Median	18
Maximum	980
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	37
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(1.5)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	28
Akita Pref.	4	Lake Hachiro	5.5
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	3.5
Fukushima Pref.	6	Onahama Port	31
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	15
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	26
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	12
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	19
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	53
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	740
	13	Mouth of Riv. Sumida (Minato Ward)	980
Yokohama City	14	Yokohama Port	160
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	180
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	9.3
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	10
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	60
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	670
Nagano Pref.	20	Lake Suwa (center)	4.3
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	18
Aichi Pref.	22	Nagoya Port	160
Mie Pref.	23	Yokkaichi Port	35
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	8.4
Kyoto Pref.		Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	230
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	110
Osaka City	27	Osaka Port	380
Hyogo Pref.	28	Offshore of Himeji	20
Kobe City	29	Kobe Port (center)	120
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	18
Okayama Pref.	31	Offshore of Mizushima	8.8
Hiroshima Pref.	32	Kure Port	18
	33	Hiroshima Bay	7.9
Yamaguchi Pref.	34	Tokuyama Bay	10
8	35	Offshore of Ube	2.7
		Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	7.4
Kagawa Pref.	38	Takamatsu Port	200
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	7.7
Kitakyushu City	40	Dokai Bay	160
Saga Pref.	41	Imari Bay	4.3
Nagasaki Pref.	42	Omura Bay	3.5
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	8.1
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	7.8
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(1.0)
1150011111111 1 101.	46	Gotanda-bashi Bridge, Riv. Amori (Krishima City)	tr(1.5)
Okinawa Pref.	47	Naha Port	28

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-4] Tetrachlorobiphenyls/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 47/48 (Missing value: 0) Detection Frequency (sample): 47/48 (Missing value: 0)

	Aggregated value
Geometric mean	28
Median	22
Maximum	1,800
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	30
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	3
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	27
Akita Pref.	4	Lake Hachiro	14
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	8
Fukushima Pref.	6	Onahama Port	31
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	24
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	36
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	17
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	20
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	65
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	940
,	13	Mouth of Riv. Sumida (Minato Ward)	1,800
Yokohama City	14	Yokohama Port	230
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	280
Niigata Pref.	16		22
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	8
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	96
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1,700
Nagano Pref.		Lake Suwa (center)	12
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	17
Aichi Pref.	22	Nagoya Port	160
Mie Pref.	23	Yokkaichi Port	39
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	18
Kyoto Pref.		Miyazu Port	
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(1) 240
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	130
Osaka Fiel. Osaka City	27	Osaka Port	510
Hyogo Pref.			
Kobe City	28	Offshore of Himeji	21
•	29	Kobe Port (center)	130
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	28
Okayama Pref.	31	Offshore of Mizushima	9
Hiroshima Pref.		Kure Port	45
7/ 1:D C		Hiroshima Bay	16
Yamaguchi Pref.	34	Tokuyama Bay	11
	35	Offshore of Ube	3
T. 1	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	12
Kagawa Pref.	38	Takamatsu Port	190
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	6
Kitakyushu City	40	Dokai Bay	440
Saga Pref.	41	Imari Bay	7
Nagasaki Pref.	42	Omura Bay	3
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	13
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	8
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(1)
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	3
Okinawa Pref.	47	Naha Port	47

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-4-1] 3,3',4,4'-Tetrachlorobiphenyl (#77) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 24/48 (Missing value: 0)
Detection Frequency (sample): 24/48 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.4)
Median	nd
Maximum	19
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.4)
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	tr(0.4)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	tr(0.4)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.6)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(0.3)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(0.7)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	9.2
	13	Mouth of Riv. Sumida (Minato Ward)	19
Yokohama City	14	Yokohama Port	1.2
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	1.9
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(0.5)
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	1.3
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.4)
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	1.3
Mie Pref.	23	Yokkaichi Port	tr(0.3)
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	tr(0.4)
Kyoto Pref.	25	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	2.3
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	1.5
Osaka City	27	Osaka Port	5.9
Hyogo Pref.	28	Offshore of Himeji	tr(0.6)
Kobe City	29	Kobe Port (center)	tr(0.6)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(0.7)
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
		Hiroshima Bay	nd
Yamaguchi Pref.		Tokuyama Bay	nd
S	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	2.2
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	4.2
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
120500000000 1 101.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-4-2] 3,4,4',5-Tetrachlorobiphenyl (#81) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 4/48 (Missing value: 0)
Detection Frequency (sample): 4/48 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(0.7)
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	tr(0.5)
	13	Mouth of Riv. Sumida (Minato Ward)	tr(0.7)
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	tr(0.3)
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMETICE.		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
r umagaem r rei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	tr(0.4)
Saga Pref.	41	Imari Bay	` '
Nagasaki Pref.	41	Omura Bay	nd nd
Kumamoto Pref.			nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-5] Pentachlorobiphenyls/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 46/48 (Missing value: 0)
Detection Frequency (sample): 46/48 (Missing value: 0)

Detection limit : 0.4 Quantification limit : 0.9

	Aggregated value
Geometric mean	18
Median	16
Maximum	720
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	14
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	4.1
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	11
Akita Pref.	4	Lake Hachiro	31
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	12
Fukushima Pref.	6	Onahama Port	17
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	16
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	21
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	12
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	19
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	30
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	370
	13	Mouth of Riv. Sumida (Minato Ward)	720
Yokohama City	14	Yokohama Port	89
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	130
Niigata Pref.	16		26
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	5.9
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	72
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	210
Nagano Pref.		Lake Suwa (center)	11
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	8.7
Aichi Pref.	22	Nagoya Port	65
Mie Pref.	23	Yokkaichi Port	15
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	20
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	200
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	90
Osaka City	27	Osaka Port	240
Hyogo Pref.	28	Offshore of Himeji	12
Kobe City	29	Kobe Port (center)	82
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	22
Okayama Pref.	31	Offshore of Mizushima	4.1
Hiroshima Pref.		Kure Port	49
THEOMETICE.		Hiroshima Bay	13
Yamaguchi Pref.	34	Tokuyama Bay	6.1
r umagaem r rei.	35	Offshore of Ube	2.6
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	15
Kagawa Pref.	38	Takamatsu Port	69
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	6.8
Kitakyushu City	40	Dokai Bay	210
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	41	Omura Bay	3.6
Kumamoto Pref.	-		
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	11
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	4.4
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	1.7
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	3.5
Okinawa Pref.	47	Naha Port	36

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

(Note 3) nd: Not detected

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

### [1-5-1] 2,3,3',4,4'-Pentachlorobiphenyl (#105) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 38/48 (Missing value: 0)
Detection Frequency (sample): 38/48 (Missing value: 0)

	Aggregated value
Geometric mean	1.1
Median	1.0
Maximum	26
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.0
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(0.6)
Akita Pref.	4	Lake Hachiro	2.1
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	0.9
Fukushima Pref.	6	Onahama Port	1.1
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(0.7)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	1.7
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	0.9
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	1.4
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	1.9
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	12
	13	Mouth of Riv. Sumida (Minato Ward)	26
Yokohama City	14	Yokohama Port	4.2
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	6.2
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	1.9
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.5)
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	2.3
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.7)
Nagano Pref.	20	Lake Suwa (center)	tr(0.6)
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(0.7)
Aichi Pref.	22	Nagoya Port	2.9
Mie Pref.	23	Yokkaichi Port	tr(0.8)
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	1.4
Kyoto Pref.		Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	8.3
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	5.6
Osaka City	27	Osaka Port	9.0
Hyogo Pref.	28	Offshore of Himeji	tr(0.6)
Kobe City	29	Kobe Port (center)	2.8
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1.5
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	1.1
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	2.1
Kagawa Pref.	38	Takamatsu Port	4.5
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	tr(0.8)
Kitakyushu City	40	Dokai Bay	12
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(0.8)
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(0.5)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(0.5)
Okinawa Pref.	47	Naha Port	1.1

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-5-2] 2,3,4,4',5-Pentachlorobiphenyl (#114) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 5/48 (Missing value: 0) Detection Frequency (sample): 5/48 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	1.8
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	tr(0.8)
		Mouth of Riv. Sumida (Minato Ward)	1.8
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	tr(0.4)
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	
Kyoto Pref.		Miyazu Port	nd nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	
Osaka Pref.			tr(0.6)
Osaka City	26	Mouth of Riv. Yamato (Sakai City) Osaka Port	nd
Hyogo Pref.			nd
, .	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref. Hiroshima Pref.	31	Offshore of Mizushima	nd
Hirosnima Prei.	32	Kure Port	nd
V 1:D C	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
	35	Offshore of Ube	nd
T. 1		Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	tr(0.8)
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-5-3] 2,3',4,4',5-Pentachlorobiphenyl (#118) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 44/48 (Missing value: 0) Detection Frequency (sample): 44/48 (Missing value: 0)

	Aggregated value
Geometric mean	2.6
Median	2.3
Maximum	95
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	2.1
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	1.0
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	1.9
Akita Pref.	4	Lake Hachiro	5.7
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	2.4
Fukushima Pref.	6	Onahama Port	2.6
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1.7
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	3.6
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	1.9
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	2.9
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	4.1
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	50
	13	Mouth of Riv. Sumida (Minato Ward)	95
Yokohama City	14	Yokohama Port	12
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	19
Niigata Pref.		Lower Riv. Shinano (Niigata City)	4.3
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	0.9
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	5.3
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.5
Nagano Pref.		Lake Suwa (center)	1.1
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	1.5
Aichi Pref.	22	Nagoya Port	6.8
Mie Pref.	23	Yokkaichi Port	2.2
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	3.0
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	24
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	13
Osaka Fiel.	27	Osaka Port	25
Hyogo Pref.	28	Offshore of Himeji	1.8
Kobe City	29	Kobe Port (center)	8.7
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	3.4
Okayama Pref.	31	Offshore of Mizushima	tr(0.7)
Hiroshima Pref.	32	Kure Port	4.2
Tinosinna i ici.	33	Hiroshima Bay	1.8
Yamaguchi Pref.	34	Tokuyama Bay	tr(0.8)
i amaguem i ici.	35	Offshore of Ube	tr(0.5)
	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	4.1
Kagawa Pref.	38	Takamatsu Port	12
Kagawa Fici. Kochi Pref.			
Kitakyushu City	39 40	Mouth of Riv. Shimanto (Shimanto City)  Dokai Bay	1.6
Saga Pref.	_	·	
	41	Imari Bay	tr(0.5)
Nagasaki Pref. Kumamoto Pref.	42	Omura Bay	nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	1.6
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(0.6)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
O1: P. C	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(0.7)
Okinawa Pref.	47	Naha Port	3.0

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-5-4] 2',3,4,4',5-Pentachlorobiphenyl (#123) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 5/48 (Missing value: 0)
Detection Frequency (sample): 5/48 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	1.5
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	tr(0.7)
,		Mouth of Riv. Sumida (Minato Ward)	1.5
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(0.5)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	tr(0.6)
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
Tillosillila Tici.	33	Hiroshima Bay	nd
Yamaguchi Pref.		Tokuyama Bay	nd
i amaguem i ici.	34	Offshore of Ube	nd
		Offshore of Hagi	nd
T-11-: Df			nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref. Kochi Pref.	38	Takamatsu Port	nd
	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	tr(0.7)
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
01: 5 0	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-5-5] 3,3',4,4',5-Pentachlorobiphenyl (#126) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 4/48 (Missing value: 0) Detection Frequency (sample): 4/48 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	2.2
Minimum	nd

	Monitored sites	Measured value
1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
3	Sendai Bay (Matsushima Bay)	nd
4	Lake Hachiro	nd
5	Mouth of Riv. Mogami (Sakata City)	nd
6	Onahama Port	nd
7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
8		nd
9		nd
10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
11	Mouth of Riv. Hanami (Chiba City)	nd
12	Mouth of Riv. Arakawa (Koto Ward)	tr(0.7)
13	Mouth of Riv. Sumida (Minato Ward)	tr(0.6)
14	Yokohama Port	nd
15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
		2.2
	87	nd
		nd
	, ,	nd
	•	nd
		tr(0.4)
		nd
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		nd
_	·	nd
		nd
		nd
44		nd
15	Chinkarya hashi Dridga Diy Amari (Vinishina City)	1
45 46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City) Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd nd
	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 25 26 27 28 29 30 31 33 33 34 35 36 36 37 37 38 38 38 38 38 38 38 38 38 38 38 38 38	2 Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City) 3 Sendai Bay (Matsushima Bay) 4 Lake Hachiro 5 Mouth of Riv. Mogami (Sakata City) 6 Onahama Port 7 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) 8 Tagawa Kyubun Area Head Works (Utsunomiya City) 9 Tone-ozeki Weir, Riv. Tone (Chiyoda Town) 1 Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) 11 Mouth of Riv. Hanami (Chiba City) 12 Mouth of Riv. Sumida (Minato Ward) 13 Mouth of Riv. Sumida (Minato Ward) 14 Yokohama Port 15 Front of Ougi Town, Keihin Canal, Port of Kawasaki 16 Lower Riv. Shinano (Niigata City) 17 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 18 Mouth of Riv. Sai (Kanazawa City) 19 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 20 Lake Suwa (center) 21 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 22 Nagoya Port 23 Yokkaichi Port 24 Lake Biwa (center, offshore of Karasaki) 25 Miyazu Port 26 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City) 27 Osaka Port 28 Offshore of Himeji 29 Kobe Port (center) 30 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 31 Offshore of Mizushima 32 Kure Port 33 Hiroshima Bay 34 Tokuyama Bay 35 Offshore of Hagi 36 Offshore of Hagi 37 Mouth of Riv. Yoshino (Tokushima City) 38 Takamatsu Port 39 Mouth of Riv. Shimanto (Shimanto City) 40 Dokai Bay 41 Ilmari Bay 42 Omura Bay 43 Hiraki-bashi Bridge, Riv. Midori (Uto City)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-6] Hexachlorobiphenyls/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 48/48 (Missing value: 0)
Detection Frequency (sample): 48/48 (Missing value: 0)

	Aggregated value
Geometric mean	11
Median	8.6
Maximum	220
Minimum	tr(0.5)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	5.6
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	1.8
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	6.2
Akita Pref.	4	Lake Hachiro	23
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	6.8
Fukushima Pref.	6	Onahama Port	7.8
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	7.1
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	12
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	6.2
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	11
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	13
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	160
	13	Mouth of Riv. Sumida (Minato Ward)	220
Yokohama City	14	Yokohama Port	39
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	59
Niigata Pref.	16		18
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	2.2
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	32
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	4.3
Nagano Pref.		Lake Suwa (center)	5.6
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	3.2
Aichi Pref.	22	Nagoya Port	21
Mie Pref.	23	Yokkaichi Port	6.1
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	14
Kyoto Pref.		Miyazu Port	tr(0.5)
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	120
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	79
Osaka City	27	Osaka Port	110
Hyogo Pref.	28	Offshore of Himeji	9.3
Kobe City	29	Kobe Port (center)	73
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	15
Okayama Pref.	31	Offshore of Mizushima	5.5
Hiroshima Pref.		Kure Port	54
Timosimila Troi.		Hiroshima Bay	12
Yamaguchi Pref.	34	Tokuyama Bay	7.6
r amagaem r rei.	35	Offshore of Ube	2.1
	36	Offshore of Hagi	tr(0.9)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	19
Kagawa Pref.	38	Takamatsu Port	38
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	6.4
Kitakyushu City	40	Dokai Bay	96
Saga Pref.	41	Imari Bay	4.4
Nagasaki Pref.	41	Omura Bay	
Kumamoto Pref.	-	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(1.4)
	43	U , , , , , , , , , , , , , , , , , , ,	6.1
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	2.0
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	1.6
Ol-in area Duref	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	3.7
Okinawa Pref.	47	Naha Port	46

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

### [1-6-1] 2,3,3',4,4',5-Hexachlorobiphenyl (#156) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 20/48 (Missing value: 0) Detection Frequency (sample): 20/48 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.4)
Median	nd
Maximum	4.4
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	tr(0.7)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.4)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(0.4)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	3.1
•	13	Mouth of Riv. Sumida (Minato Ward)	4.4
Yokohama City	14	Yokohama Port	tr(0.7)
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	1.2
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(0.7)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(0.7)
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	tr(0.4)
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	tr(0.5)
Kyoto Pref.		Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	3.0
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	1.9
Osaka City	27	Osaka Port	1.8
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	tr(0.8)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(0.4)
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
C	35	Offshore of Ube	nd
		Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	1.3
Kagawa Pref.	38	Takamatsu Port	1.1
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	1.8
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-6-2] 2,3,3',4,4',5'-Hexachlorobiphenyl (#157) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 6/48 (Missing value: 0)
Detection Frequency (sample): 6/48 (Missing value: 0)

<b>.</b>	_
	Aggregated value
Geometric mean	nd
Median	nd
Maximum	1.2
Minimum	nd

Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)  Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)  Sendai Bay (Matsushima Bay)  Lake Hachiro  Mouth of Riv. Mogami (Sakata City)  Onahama Port  Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)  Tagawa Kyubun Area Head Works (Utsunomiya City)  Tone-ozeki Weir, Riv. Tone (Chiyoda Town)  Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)  Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki  Lower Riv. Shinano (Niigata City)  Mouth of Riv. Sai (Kanazawa City)  Mishima-bashi Bridge, Riv. Shono (Tsuruga City)  Lake Suwa (center)  Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd n
Sendai Bay (Matsushima Bay)  Lake Hachiro  Mouth of Riv. Mogami (Sakata City)  Onahama Port  Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)  Tagawa Kyubun Area Head Works (Utsunomiya City)  Tone-ozeki Weir, Riv. Tone (Chiyoda Town)  Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)  Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki  Lower Riv. Shinano (Niigata City)  Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)  Mouth of Riv. Sai (Kanazawa City)  Mishima-bashi Bridge, Riv. Shono (Tsuruga City)  Lake Suwa (center)	nd n
Lake Hachiro  Mouth of Riv. Mogami (Sakata City)  Onahama Port  Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)  Tagawa Kyubun Area Head Works (Utsunomiya City)  Tone-ozeki Weir, Riv. Tone (Chiyoda Town)  Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)  Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki  Lower Riv. Shinano (Niigata City)  Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)  Mouth of Riv. Sai (Kanazawa City)  Mishima-bashi Bridge, Riv. Shono (Tsuruga City)  Lake Suwa (center)	nd n
Mouth of Riv. Mogami (Sakata City) Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Tone-ozeki Weir, Riv. Tone (Chiyoda Town) Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Lake Suwa (center)	nd tr(0.8) 1.2 nd
Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Tone-ozeki Weir, Riv. Tone (Chiyoda Town) Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Lake Suwa (center)	nd nd nd nd nd nd nd nd nd tr(0.8) 1.2 nd
Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Tone-ozeki Weir, Riv. Tone (Chiyoda Town) Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Lake Suwa (center)	nd nd nd nd nd tr(0.8) 1.2 nd
Tagawa Kyubun Area Head Works (Utsunomiya City)  Tone-ozeki Weir, Riv. Tone (Chiyoda Town)  Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)  Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki  Lower Riv. Shinano (Niigata City)  Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)  Mouth of Riv. Sai (Kanazawa City)  Mishima-bashi Bridge, Riv. Shono (Tsuruga City)  Lake Suwa (center)	nd nd nd nd tr(0.8) 1.2 nd
Tagawa Kyubun Area Head Works (Utsunomiya City)  Tone-ozeki Weir, Riv. Tone (Chiyoda Town)  Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)  Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki  Lower Riv. Shinano (Niigata City)  Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)  Mouth of Riv. Sai (Kanazawa City)  Mishima-bashi Bridge, Riv. Shono (Tsuruga City)  Lake Suwa (center)	nd nd nd tr(0.8) 1.2 nd
Tone-ozeki Weir, Riv. Tone (Chiyoda Town)  Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)  Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki  Lower Riv. Shinano (Niigata City)  Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)  Mouth of Riv. Sai (Kanazawa City)  Mishima-bashi Bridge, Riv. Shono (Tsuruga City)  Lake Suwa (center)	nd nd tr(0.8) 1.2 nd
Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)  Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki  Lower Riv. Shinano (Niigata City)  Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)  Mouth of Riv. Sai (Kanazawa City)  Mishima-bashi Bridge, Riv. Shono (Tsuruga City)  Lake Suwa (center)	nd tr(0.8) 1.2 nd nd nd nd nd nd nd nd
Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki  Lower Riv. Shinano (Niigata City)  Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)  Mouth of Riv. Sai (Kanazawa City)  Mishima-bashi Bridge, Riv. Shono (Tsuruga City)  Lake Suwa (center)	tr(0.8)  1.2  nd  nd  nd  nd  nd  nd  nd  nd  nd  n
Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki  Lower Riv. Shinano (Niigata City)  Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)  Mouth of Riv. Sai (Kanazawa City)  Mishima-bashi Bridge, Riv. Shono (Tsuruga City)  Lake Suwa (center)	nd nd nd nd nd nd nd
Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Lake Suwa (center)	nd nd nd nd nd nd nd
Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Lake Suwa (center)	nd nd nd nd nd
Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Lake Suwa (center)	nd nd nd nd
Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Lake Suwa (center)	nd nd nd
Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)  Mouth of Riv. Sai (Kanazawa City)  Mishima-bashi Bridge, Riv. Shono (Tsuruga City)  Lake Suwa (center)	nd nd nd
Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Lake Suwa (center)	nd
Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Lake Suwa (center)	nd
Lake Suwa (center)	
	nd
Nagoya Port	nd
Yokkaichi Port	nd
	nd
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	tr(0.8)
	tr(0.5)
	tr(0.6)
	nd
· ·	nd
3 3	nd
	tr(0.4)
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	nd nd
	Lake Biwa (center, offshore of Karasaki) Miyazu Port Miyamae-bashi Bridge, Riv. Katsura (Kyoto City) Mouth of Riv. Yamato (Sakai City) Osaka Port Offshore of Himeji Kobe Port (center) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Imari Bay Omura Bay Hiraki-bashi Bridge, Riv. Midori (Uto City) Mouth of Riv. Oyodo (Miyazaki City)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

### [1-6-3] 2,3',4,4',5,5'-Hexachlorobiphenyl (#167) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 9/48 (Missing value: 0)
Detection Frequency (sample): 9/48 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	2.2
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	1.6
	13	Mouth of Riv. Sumida (Minato Ward)	2.2
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	tr(0.7)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	1.4
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(0.9)
Osaka City	27	Osaka Port	1.0
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMETICE.		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
r umagaem r rei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(0.4)
Kagawa Pref.	38	Takamatsu Port	tr(0.5)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	tr(0.9)
Saga Pref.	41	Imari Bay	` '
Nagasaki Pref.	41	Omura Bay	nd
Kumamoto Pref.	-		nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

### [1-6-4] 3,3',4,4',5,5'-Hexachlorobiphenyl (#169) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 0/48 (Missing value: 0)
Detection Frequency (sample): 0/48 (Missing value: 0)

Detection limit : 0.4 Quantification limit : 1.0

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMINA TIO		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
r umagaem r rei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	41	Omura Bay	nd nd
Kumamoto Pref.			nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

(Note 3) nd: Not detected

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

### [1-7] Heptachlorobiphenyls/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 41/48 (Missing value: 0)
Detection Frequency (sample): 41/48 (Missing value: 0)

	Aggregated value
Geometric mean	2.3
Median	1.9
Maximum	43
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.6)
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	1.4
Akita Pref.	4	Lake Hachiro	3.8
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(0.6)
Fukushima Pref.	6	Onahama Port	1.4
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(0.6)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(1.0)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(0.9)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(0.7)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	2.1
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	34
	13	Mouth of Riv. Sumida (Minato Ward)	42
Yokohama City	14	Yokohama Port	11
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	15
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	3.6
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	4.4
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	tr(0.7)
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	4.8
Mie Pref.	23	Yokkaichi Port	tr(0.7)
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	tr(0.6)
Kyoto Pref.	25	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	20
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	43
Osaka City	27	Osaka Port	25
Hyogo Pref.	28	Offshore of Himeji	2.0
Kobe City	29	Kobe Port (center)	35
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	2.7
Okayama Pref.	31	Offshore of Mizushima	1.8
Hiroshima Pref.	32	Kure Port	27
	33	Hiroshima Bay	2.6
Yamaguchi Pref.	34	Tokuyama Bay	4.4
-	35	Offshore of Ube	3.0
	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	3.6
Kagawa Pref.	38	Takamatsu Port	9.5
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	tr(0.9)
Kitakyushu City	40	Dokai Bay	42
Saga Pref.	41	Imari Bay	2.2
Nagasaki Pref.	42	Omura Bay	tr(0.6)
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	1.5
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(0.6)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
2	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	1.4
Okinawa Pref.	47	Naha Port	26

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-7-1] 2,2',3,3',4,4',5-Heptachlorobiphenyl (#170) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 21/48 (Missing value: 0) Detection Frequency (sample): 21/48 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.6)
Median	nd
Maximum	5.1
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	tr(0.8)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(0.6)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	3.9
		Mouth of Riv. Sumida (Minato Ward)	5.1
Yokohama City	14	Yokohama Port	1.4
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	2.2
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	tr(0.8)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(1.0)
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	tr(0.7)
Mie Pref.	23	Yokkaichi Port	` '
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd 3.3
Osaka Pref.			
	26 27	Mouth of Riv. Yamato (Sakai City) Osaka Port	4.5
Osaka City			3.2
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	3.2
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(0.6)
Okayama Pref. Hiroshima Pref.	31	Offshore of Mizushima	nd
Hirosnima Prei.	32	Kure Port	2.4
V 1:D C	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	tr(0.7)
	35	Offshore of Ube	tr(0.5)
T. 1 . 1		Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	tr(1.1)
Kagawa Pref.	38	Takamatsu Port	1.5
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	3.7
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	2.5

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

# $[1\text{-}7\text{-}2]\ 2\text{,}2'\text{,}3\text{,}4\text{,}4'\text{,}5\text{,}5'\text{-}Heptachlorobiphenyl}\ (\#180)\ /surface\ water\ (pg/L)$

Monitored year: 2022

Detection Frequency (site): 40/48 (Missing value: 0) Detection Frequency (sample): 40/48 (Missing value: 0)

	Aggregated value
Geometric mean	1.3
Median	tr(0.9)
Maximum	12
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.6)
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(0.7)
Akita Pref.	4	Lake Hachiro	1.6
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(0.6)
Fukushima Pref.	6	Onahama Port	tr(0.8)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(0.6)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(1.0)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(0.9)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(0.7)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(0.9)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	8.5
	13	Mouth of Riv. Sumida (Minato Ward)	11
Yokohama City	14	Yokohama Port	3.6
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	4.4
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	1.6
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1.9
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	tr(0.7)
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	1.5
Mie Pref.	23	Yokkaichi Port	tr(0.7)
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	5.3
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	12
Osaka City	27	Osaka Port	7.0
Hyogo Pref.	28	Offshore of Himeji	tr(0.7)
Kobe City	29	Kobe Port (center)	9.0
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1.3
Okayama Pref.	31	Offshore of Mizushima	tr(0.8)
Hiroshima Pref.		Kure Port	7.2
		Hiroshima Bay	tr(1.2)
Yamaguchi Pref.	34	Tokuyama Bay	2.2
	35	Offshore of Ube	1.5
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	1.6
Kagawa Pref.		Takamatsu Port	2.7
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	tr(0.9)
Kitakyushu City	40	Dokai Bay	11
Saga Pref.	41	Imari Bay	tr(1.2)
Nagasaki Pref.	42	Omura Bay	tr(0.6)
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(0.9)
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(0.6)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
imgosiiiia i ici.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(0.9)
		DEPARTMENT OF THE PROPERTY AND ADDRESS OF THE PROPERTY OF THE	1 100.91

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

# $[1\text{-}7\text{-}3]\ 2,3,3',4,4',5,5'\text{-}Heptachlorobiphenyl}\ (\#189)\ /surface\ water\ (pg/L)$

Monitored year: 2022

Detection Frequency (site): 0/48 (Missing value: 0)
Detection Frequency (sample): 0/48 (Missing value: 0)

Detection limit : 0.5 Quantification limit : 1.3

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMETICE.		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
r umagaem r rei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	41	Omura Bay	nd nd
Kumamoto Pref.			nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

(Note 3) nd: Not detected

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

### [1-8] Octachlorobiphenyls/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 14/48 (Missing value: 0) Detection Frequency (sample): 14/48 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.4)
Median	nd
Maximum	9.1
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	4.8
•	13	Mouth of Riv. Sumida (Minato Ward)	5.7
Yokohama City	14	Yokohama Port	1.5
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	1.7
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	1.6
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	9.1
Osaka City	27	Osaka Port	3.6
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	4.8
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	3.9
		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	1.8
	35	Offshore of Ube	1.2
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	1.2
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	7.3
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
imposimia i ici.	73		IIU
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-9] Nonachlorobiphenyls/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 11/48 (Missing value: 0) Detection Frequency (sample): 11/48 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	1.2
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(0.2)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	0.7
,	13	Mouth of Riv. Sumida (Minato Ward)	0.9
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(0.4)
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	_
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd tr(0.2)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	tr(0.2) tr(0.5)
Osaka Fiel. Osaka City	27	Osaka Port	` ′
Hyogo Pref.			tr(0.3)
Kobe City	28	Offshore of Himeji	nd
•	29	Kobe Port (center)	tr(0.2)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	tr(0.2)
V 1:D C		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	1.2
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	tr(0.4)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-10] Decachlorobiphenyl/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 23/48 (Missing value: 0)
Detection Frequency (sample): 23/48 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.2)
Median	nd
Maximum	8.8
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.3)
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(0.3)
Akita Pref.	4	Lake Hachiro	0.7
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	0.6
Fukushima Pref.	6	Onahama Port	0.6
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(0.3)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	0.6
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	1.6
•	13	Mouth of Riv. Sumida (Minato Ward)	1.2
Yokohama City	14	Yokohama Port	tr(0.4)
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	tr(0.2)
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	tr(0.5)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(0.2)
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(0.3)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	tr(0.3)
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(0.2)
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	tr(0.3)
Timosimia Troi.	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
r amagaem r rei.	35	Offshore of Ube	tr(0.4)
		Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	tr(0.2)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	tr(0.4)
Kitakyushu City	40	Dokai Bay	8.8
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	42	Omura Bay	nd nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	
Miyazaki Pref.	43		tr(0.3)
		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olrinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	tr(0.3)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [2] HCB (Hexachlorobenzene) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 48/48 (Missing value: 0)
Detection Frequency (sample): 48/48 (Missing value: 0)

	Aggregated value
Geometric mean	5.3
Median	4.0
Maximum	70
Minimum	1.6

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	14
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	4.7
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	2.9
Akita Pref.	4	Lake Hachiro	5.0
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	6.7
Fukushima Pref.	6	Onahama Port	70
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	18
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	5.9
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	33
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	18
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	3.9
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	18
	13	Mouth of Riv. Sumida (Minato Ward)	11
Yokohama City	14	Yokohama Port	3.3
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	6.2
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	21
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	6.2
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	12
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	4.0
Nagano Pref.	20	Lake Suwa (center)	9.4
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	4.6
Aichi Pref.	22	Nagoya Port	4.1
Mie Pref.	23	Yokkaichi Port	2.7
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	3.0
Kyoto Pref.	25	Miyazu Port	1.9
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	7.8
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	5.7
Osaka City	27	Osaka Port	6.7
Hyogo Pref.	28	Offshore of Himeji	1.9
Kobe City	29	Kobe Port (center)	2.2
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	4.0
Okayama Pref.	31	Offshore of Mizushima	3.2
Hiroshima Pref.	32	Kure Port	1.8
		Hiroshima Bay	1.6
Yamaguchi Pref.		Tokuyama Bay	6.2
Č	35	Offshore of Ube	2.4
	36	Offshore of Hagi	1.9
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	2.9
Kagawa Pref.		Takamatsu Port	2.7
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	2.8
Kitakyushu City	40	Dokai Bay	66
Saga Pref.	41	Imari Bay	2.8
Nagasaki Pref.	42	Omura Bay	3.5
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	5.0
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	3.2
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	3.6
120000000000000000000000000000000000000	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	3.7
Okinawa Pref.	47	Naha Port	1.6

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).
Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).
(Note 2) Data treated as detected means detection limit value and more.

# [11-1] $\alpha$ -HCH /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 48/48 (Missing value: 0)
Detection Frequency (sample): 48/48 (Missing value: 0)

Detection limit : 0.5 Quantification limit : 1.2

	Aggregated value
Geometric mean	24
Median	21
Maximum	430
Minimum	1.9

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	56
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	14
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	22
Akita Pref.	4	Lake Hachiro	160
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	37
Fukushima Pref.	6	Onahama Port	25
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	45
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	48
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	430
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	120
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	23
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	74
	13	Mouth of Riv. Sumida (Minato Ward)	59
Yokohama City	14	Yokohama Port	21
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	23
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	80
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	9.9
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	38
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	4.1
Nagano Pref.		Lake Suwa (center)	23
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	8.6
Aichi Pref.	22	Nagoya Port	29
Mie Pref.	23	Yokkaichi Port	23
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	120
Kyoto Pref.		Miyazu Port	7.6
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	81
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	79
Osaka City	27	Osaka Port	160
Hyogo Pref.	28	Offshore of Himeji	11
Kobe City	29	Kobe Port (center)	21
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	13
Okayama Pref.	31	Offshore of Mizushima	10
Hiroshima Pref.	32	Kure Port	9.1
	33	Hiroshima Bay	9.5
Yamaguchi Pref.	34	Tokuyama Bay	17
	35	Offshore of Ube	12
	36	Offshore of Hagi	5.3
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	13
Kagawa Pref.	38	Takamatsu Port	18
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	5.6
Kitakyushu City	40	Dokai Bay	210
Saga Pref.	41	Imari Bay	15
Nagasaki Pref.	42	Omura Bay	8.3
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	16
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	20
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	8.8
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	11
Okinawa Pref.	47	Naha Port	1.9

(Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

# [11-2] $\beta$ -HCH /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 48/48 (Missing value: 0)
Detection Frequency (sample): 48/48 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.6

	Aggregated value
Geometric mean	76
Median	69
Maximum	540
Minimum	9.5

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	320
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	24
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	59
Akita Pref.	4	Lake Hachiro	540
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	120
Fukushima Pref.	6	Onahama Port	84
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	130
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	93
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	360
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	200
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	75
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	180
	13	Mouth of Riv. Sumida (Minato Ward)	140
Yokohama City	14	Yokohama Port	60
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	66
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	140
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	19
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	88
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	9.5
Nagano Pref.		Lake Suwa (center)	75
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	18
Aichi Pref.		Nagoya Port	75
Mie Pref.	23	Yokkaichi Port	35
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	290
Kyoto Pref.		Miyazu Port	34
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	260
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	290
Osaka City	27	Osaka Port	420
Hyogo Pref.	28	Offshore of Himeji	61
Kobe City	29	Kobe Port (center)	85
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	49
Okayama Pref.	31	Offshore of Mizushima	39
Hiroshima Pref.		Kure Port	34
		Hiroshima Bay	35
Yamaguchi Pref.	34	Tokuyama Bay	68
	35	Offshore of Ube	48
	36	Offshore of Hagi	29
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	65
Kagawa Pref.		Takamatsu Port	80
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	14
Kitakyushu City	40	Dokai Bay	340
Saga Pref.	41	Imari Bay	45
Nagasaki Pref.	42	Omura Bay	35
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	64
Miyazaki Pref.	43	Mouth of Riv. Oyodo (Miyazaki City)	70
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	51
1 ICI.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	240

(Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

# [11-3] $\gamma$ -HCH (synonym: Lindane) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 48/48 (Missing value: 0)
Detection Frequency (sample): 48/48 (Missing value: 0)

	Aggregated value
Geometric mean	9.3
Median	8.0
Maximum	120
Minimum	tr(0.6)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	20
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	18
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	9.1
Akita Pref.	4	Lake Hachiro	26
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	9.1
Fukushima Pref.	6	Onahama Port	11
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	17
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	120
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	27
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	12
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	16
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	41
,	13	Mouth of Riv. Sumida (Minato Ward)	56
Yokohama City	14	Yokohama Port	11
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	13
Niigata Pref.	16		75
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	3.8
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	15
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.1
Nagano Pref.		Lake Suwa (center)	7.4
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	5.2
Aichi Pref.	22	Nagoya Port	7.5
Mie Pref.	23	Yokkaichi Port	5.3
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	3.3
Kyoto Pref.		Miyazu Port	2.4
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	59
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	55
Osaka Fiel. Osaka City	27	Osaka Port	55
Hyogo Pref.			
Kobe City	28	Offshore of Himeji	5.1
•	29	Kobe Port (center)	9.0
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	5.1
Okayama Pref.	31	Offshore of Mizushima	4.9
Hiroshima Pref.		Kure Port	4.3
V 1:D C		Hiroshima Bay	4.2
Yamaguchi Pref.	34	Tokuyama Bay	4.2
	35	Offshore of Ube	4.3
T. 1	36	Offshore of Hagi	1.8
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	5.5
Kagawa Pref.	38	Takamatsu Port	7.2
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	3.0
Kitakyushu City	40	Dokai Bay	58
Saga Pref.	41	Imari Bay	2.4
Nagasaki Pref.	42	Omura Bay	2.8
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	5.6
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	8.4
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	4.0
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	3.0
Okinawa Pref.	47	Naha Port	tr(0.6)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

# [11-4] $\delta$ -HCH /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 41/48 (Missing value: 0)
Detection Frequency (sample): 41/48 (Missing value: 0)

	Aggregated value
Geometric mean	3.6
Median	3.0
Maximum	90
Minimum	nd

1 2 3	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City) Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	19
	Tovosawa-bashi Bridge, Riv. Tovosawa (Hanamaki City)	
3		65
	Sendai Bay (Matsushima Bay)	2.1
4	Lake Hachiro	26
5	Mouth of Riv. Mogami (Sakata City)	10
6	Onahama Port	2.5
7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	7.3
8		15
9		23
		18
	Mouth of Riv. Hanami (Chiba City)	2.8
12	Mouth of Riv. Arakawa (Koto Ward)	17
13	Mouth of Riv. Sumida (Minato Ward)	9.6
14	Yokohama Port	2.3
15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	2.3
		18
		2.4
		6.1
		6.5
		5.8
		tr(1.1)
		2.0
		2.3
_		15
		nd
	•	11
		15
		20
		3.1
		3.8
	` /	2.0
		nd
		nd
		nd
	·	2.8
		tr(1.0)
		nd
	· ·	tr(1.5)
	• */	3.2
		tr(0.7)
	· •//	90
	·	tr(1.6)
		nd
	, , , , , , , , , , , , , , , , , , ,	2.5
		4.6
		3.0 nd
	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38	8 Tagawa Kyubun Area Head Works (Utsunomiya City) 9 Tone-ozeki Weir, Riv. Tone (Chiyoda Town) 10 Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) 11 Mouth of Riv. Hanami (Chiba City) 12 Mouth of Riv. Sumida (Minato Ward) 13 Mouth of Riv. Sumida (Minato Ward) 14 Yokohama Port 15 Front of Ougi Town, Keihin Canal, Port of Kawasaki 16 Lower Riv. Shinano (Niigata City) 17 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 18 Mouth of Riv. Sai (Kanazawa City) 19 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 20 Lake Suwa (center) 21 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 22 Nagoya Port 23 Yokkaichi Port 24 Lake Biwa (center, offshore of Karasaki) 25 Miyazu Port 26 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City) 27 Osaka Port 28 Offshore of Himeji 29 Kobe Port (center) 30 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 31 Offshore of Mizushima 32 Kure Port 33 Hiroshima Bay 34 Tokuyama Bay 35 Offshore of Ube 36 Offshore of Hagi 37 Mouth of Riv. Yoshino (Tokushima City) 38 Takamatsu Port 39 Mouth of Riv. Shimanto (Shimanto City) 40 Dokai Bay 41 Imari Bay 41 Imari Bay 42 Omura Bay 43 Hiraki-bashi Bridge, Riv. Midori (Uto City) 44 Mouth of Riv. Oyodo (Miyazaki City) 45 Shinkawa-bashi Bridge, Riv. Amori (Kirishima City) 46 Gotanda-bashi Bridge, Riv. Amori (Kirishima City)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

### [14] Polybromodiphenyl ethers(Br4~Br10) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 45/48 (Missing value: 0) Detection Frequency (sample): 45/48 (Missing value: 0)

Detection limit: \*15 Quantification limit: \*39

	Aggregated value
Geometric mean	110
Median	100
Maximum	6,300
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(34)
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	160
Akita Pref.	4	Lake Hachiro	96
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(31)
Fukushima Pref.	6	Onahama Port	200
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	380
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	160
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	110
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	160
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	320
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	920
	13	Mouth of Riv. Sumida (Minato Ward)	710
Yokohama City	14	Yokohama Port	120
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	76
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	330
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1,300
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	180
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	tr(32)
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(30)
Aichi Pref.	22	Nagoya Port	570
Mie Pref.	23	Yokkaichi Port	130
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	43
Kyoto Pref.	25	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	1,200
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	400
Osaka City	27	Osaka Port	400
Hyogo Pref.	28	Offshore of Himeji	tr(27)
Kobe City	29	Kobe Port (center)	1,500
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	210
Okayama Pref.	31	Offshore of Mizushima	tr(28)
Hiroshima Pref.	32	Kure Port	tr(36)
	33	Hiroshima Bay	53
Yamaguchi Pref.		Tokuyama Bay	6,300
-	35	Offshore of Ube	160
	36	Offshore of Hagi	tr(26)
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	50
Kagawa Pref.	38	Takamatsu Port	260
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	65
Kitakyushu City	40	Dokai Bay	220
Saga Pref.	41	Imari Bay	tr(16)
Nagasaki Pref.	42	Omura Bay	75
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	80
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	55
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(19)
_	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	49
Okinawa Pref.	47	Naha Port	40

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

<sup>(</sup>Note 5) \*: Indicates the sum value of the Quantification [Detection] limits of each congeners.

### [14-1] Tetrabromodiphenyl ethers /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 48/48 (Missing value: 0)
Detection Frequency (sample): 48/48 (Missing value: 0)

Detection limit : 2 Quantification limit : 6

	Aggregated value
Geometric mean	tr(4)
Median	tr(3)
Maximum	140
Minimum	tr(2)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(4)
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(3)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	97
Akita Pref.	4	Lake Hachiro	tr(3)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(3)
Fukushima Pref.	6	Onahama Port	140
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(3)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(3)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(4)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(4)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(4)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	tr(5)
	13	Mouth of Riv. Sumida (Minato Ward)	9
Yokohama City	14	Yokohama Port	6
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	tr(3)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(4)
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(3)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(4)
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(3)
Nagano Pref.		Lake Suwa (center)	tr(3)
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	8
Aichi Pref.		Nagoya Port	31
Mie Pref.	23	Yokkaichi Port	tr(3)
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	tr(3)
Kyoto Pref.		Miyazu Port	tr(3)
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	8
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(5)
Osaka City	27	Osaka Port	tr(5)
Hyogo Pref.	28	Offshore of Himeji	tr(3)
Kobe City	29	Kobe Port (center)	tr(4)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(3)
Okayama Pref.	31	Offshore of Mizushima	tr(3)
Hiroshima Pref.		Kure Port	tr(4)
		Hiroshima Bay	tr(3)
Yamaguchi Pref.	34	Tokuyama Bay	tr(2)
8	35	Offshore of Ube	tr(3)
	36	Offshore of Hagi	tr(2)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(2)
Kagawa Pref.		Takamatsu Port	10
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	17
Kitakyushu City	40	Dokai Bay	tr(3)
Saga Pref.	41	Imari Bay	tr(2)
Nagasaki Pref.	42	Omura Bay	tr(3)
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(2)
Miyazaki Pref.	43	Mouth of Riv. Oyodo (Miyazaki City)	tr(2)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(2)
imposimia i ici.	73		u(3)
_	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(5)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

### [14-1-1] 2,2',4,4'-Tetrabromodiphenyl ether (#47) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 48/48 (Missing value: 0)
Detection Frequency (sample): 48/48 (Missing value: 0)

Detection limit : 2 Quantification limit : 6

	Aggregated value
Geometric mean	tr(4)
Median	tr(3)
Maximum	130
Minimum	tr(2)

1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(4)
		u(4)
2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(3)
3	Sendai Bay (Matsushima Bay)	95
4	Lake Hachiro	tr(3)
5	Mouth of Riv. Mogami (Sakata City)	tr(3)
6	Onahama Port	130
7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(3)
8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(3)
9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(4)
	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(4)
11	Mouth of Riv. Hanami (Chiba City)	tr(4)
12	Mouth of Riv. Arakawa (Koto Ward)	tr(5)
13	Mouth of Riv. Sumida (Minato Ward)	9
14	Yokohama Port	6
15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	tr(3)
		tr(4)
		tr(3)
		tr(4)
		tr(3)
		tr(3)
		8
		8
	8,	tr(3)
		tr(3)
		tr(3)
		8
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		tr(2)
40	Simikawa-bashi driuge, Kiv. Aliiori (Kirisnima City)	tr(3)
46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(5)
	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 25 26 27 28 29 30 31 33 33 34 35 36 36 36 37 37 38 38 38 38 38 38 38 38 38 38 38 38 38	3 Sendai Bay (Matsushima Bay) 4 Lake Hachiro 5 Mouth of Riv. Mogami (Sakata City) 6 Onahama Port 7 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) 8 Tagawa Kyubun Area Head Works (Utsunomiya City) 9 Tone-ozeki Weir, Riv. Tone (Chiyoda Town) 10 Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) 11 Mouth of Riv. Hanami (Chiba City) 12 Mouth of Riv. Sumida (Minato Ward) 13 Mouth of Riv. Sumida (Minato Ward) 14 Yokohama Port 15 Front of Ougi Town, Keihin Canal, Port of Kawasaki 16 Lower Riv. Shinano (Niigata City) 17 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 18 Mouth of Riv. Sai (Kanazawa City) 19 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 10 Lake Suwa (center) 11 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 12 Nagoya Port 13 Yokkaichi Port 14 Lake Biwa (center, offshore of Karasaki) 15 Miyazu Port 16 Myamae-bashi Bridge, Riv. Katsura (Kyoto City) 17 Osaka Port 18 Offshore of Himeji 19 Kobe Port (center) 20 Osaka Port 21 Offshore of Mizushima 22 Kure Port 23 Hiroshima Bay 24 Tokuyama Bay 25 Offshore of Hagi 26 Offshore of Hagi 27 Mouth of Riv. Yoshino (Tokushima City) 28 Takamatsu Port 29 Mouth of Riv. Yoshino (Tokushima City) 20 Dokai Bay 41 Imari Bay 42 Omura Bay 43 Hiraki-bashi Bridge, Riv. Midori (Uto City) 44 Mouth of Riv. Oyodo (Miyazaki City)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

### [14-2] Pentabromodiphenyl ethers /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 40/48 (Missing value: 0) Detection Frequency (sample): 40/48 (Missing value: 0)

	Aggregated value
Geometric mean	tr(1.7)
Median	tr(1.4)
Maximum	31
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(1.4)
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(1.2)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	22
Akita Pref.	4	Lake Hachiro	tr(1.1)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(1.0)
Fukushima Pref.	6	Onahama Port	31
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(1.0)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(1.2)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(1.8)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	3.9
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(2.1)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	4.4
	13	Mouth of Riv. Sumida (Minato Ward)	8.4
Yokohama City	14	Yokohama Port	3.3
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	tr(1.8)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(1.8)
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(1.5)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	2.9
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(1.1)
Nagano Pref.		Lake Suwa (center)	tr(1.1)
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	3.7
Aichi Pref.	22	Nagoya Port	21
Mie Pref.	23	Yokkaichi Port	tr(1.2)
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	tr(1.2)
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	4.0
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(2.3)
Osaka City	27	Osaka Port	tr(2.2)
Hyogo Pref.	28	Offshore of Himeji	tr(1.2)
Kobe City	29	Kobe Port (center)	tr(1.3)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(1.0)
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	tr(1.3)
		Hiroshima Bay	tr(2.1)
Yamaguchi Pref.	34	Tokuyama Bay	nd
g	35	Offshore of Ube	tr(1.5)
	36	Offshore of Hagi	tr(1.4)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(1.1)
Kagawa Pref.	38	Takamatsu Port	4.0
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	4.7
Kitakyushu City	40	Dokai Bay	tr(2.2)
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	43	Mouth of Riv. Oyodo (Miyazaki City)	nd
	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(1.3)
Kagoshima Pref			
Kagoshima Pref.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	3.6

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [14-2-1] 2,2',4,4',5-Pentabromodiphenyl ether (#99) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 40/48 (Missing value: 0) Detection Frequency (sample): 40/48 (Missing value: 0)

	Aggregated value
Geometric mean	tr(1.5)
Median	tr(1.4)
Maximum	21
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(1.4)
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(1.2)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	12
Akita Pref.	4	Lake Hachiro	tr(1.1)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(1.0)
Fukushima Pref.	6	Onahama Port	21
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(1.0)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(1.2)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(1.8)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	2.8
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(2.1)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	3.2
	13	Mouth of Riv. Sumida (Minato Ward)	6.5
Yokohama City	14	Yokohama Port	2.4
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	tr(1.8)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(1.8)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(1.5)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(1.9)
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(1.1)
Nagano Pref.		Lake Suwa (center)	tr(1.1)
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	2.5
Aichi Pref.	22	Nagoya Port	4.0
Mie Pref.	23	Yokkaichi Port	tr(1.2)
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	tr(1.2)
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	2.9
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(2.3)
Osaka City	27	Osaka Port	tr(2.2)
Hyogo Pref.	28	Offshore of Himeji	tr(1.2)
Kobe City	29	Kobe Port (center)	tr(1.3)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(1.0)
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	tr(1.3)
THEOMETICE.		Hiroshima Bay	tr(2.1)
Yamaguchi Pref.	34	Tokuyama Bay	nd
r amagaem r rei.	35	Offshore of Ube	tr(1.5)
	36	Offshore of Hagi	tr(1.4)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(1.1)
Kagawa Pref.	38	Takamatsu Port	2.4
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	3.2
Kitakyushu City	40	Dokai Bay	tr(2.2)
Saga Pref.	41	Imari Bay	` '
Nagasaki Pref.	41	Omura Bay	nd
Kumamoto Pref.			nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd +(1,2)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(1.3)
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	2.5
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [14-3] Hexabromodiphenyl ethers /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 5/48 (Missing value: 0) Detection Frequency (sample): 5/48 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	10
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	4
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	4
	13	Mouth of Riv. Sumida (Minato Ward)	tr(1)
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	10
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMETICE.		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	tr(2)
r umagaem r rei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	41	Omura Bay	nd
Kumamoto Pref.			nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [14-3-1] 2,2',4,4',5,5'-Hexabromodiphenyl ether (#153) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 3/48 (Missing value: 0)
Detection Frequency (sample): 3/48 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(2)
Minimum	nd

	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
2		114
2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
3	Sendai Bay (Matsushima Bay)	nd
4	Lake Hachiro	nd
5	Mouth of Riv. Mogami (Sakata City)	nd
6	Onahama Port	nd
7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
		nd
		nd
		tr(2)
		nd
12	Mouth of Riv. Arakawa (Koto Ward)	tr(2)
13	Mouth of Riv. Sumida (Minato Ward)	nd
	Yokohama Port	nd
		tr(1)
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46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 25 26 27 28 29 30 31 32 33 34 35 36 37 38 38 40 40 40 40 40 40 40 40 40 40 40 40 40	Mouth of Riv. Mogami (Sakata City) Conahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tonecazeki Weir, Riv. Tone (Chiyoda Town) Cagawa Kyubun Area Head Works (Utsunomiya City) Tone-ozeki Weir, Riv. Tone (Chiyoda Town) Cakigase-shusuizeki Weir, Riv. Arakawa (Shiki City) Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward) Cohoma Port Cohoma Port Front of Ougi Town, Keihin Canal, Port of Kawasaki Lower Riv. Shinano (Niigata City) Mouth of Riv. Sai (Kanazawa City) Cake Suwa (center) Cake Suwa (center) Cake Suwa (center) Cake Biwa (center) Cake Biwa (center, offshore of Karasaki) Mouth of Riv. Yamato (Sakai City) Misma-bashi Bridge, Riv. Katsura (Kyoto City) Mouth of Riv. Yamato (Sakai City) Coska Port Cosk

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [14-3-2] 2,2',4,4',5,6'-Hexabromodiphenyl ether (#154) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 2/48 (Missing value: 0)
Detection Frequency (sample): 2/48 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(2)
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(1)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	tr(2)
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMINA TIO		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
r umagaem r rei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	41	Omura Bay	nd nd
Kumamoto Pref.			nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [14-4] Heptabromodiphenyl ethers /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 1/48 (Missing value: 0)
Detection Frequency (sample): 1/48 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(6)
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(6)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
,		Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.			nd
		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

[14-4-1] 2,2',3,3',4,5',6-Heptabromodiphenyl ether (#175) /surface water (pg/L) and [14-4-2] 2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 1/48 (Missing value: 0) Detection Frequency (sample): 1/48 (Missing value: 0)

 $Detection\ limit: 3$  $Quantification\ limit: 8$ 

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(6)
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(6)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
,	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	
Kyoto Pref.	25	Miyazu Port	nd nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	
Okayama Pref.	31	Offshore of Mizushima	nd nd
Hiroshima Pref.	32	Kure Port	nd
Tinosiima i ici.		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
Tamaguem Trei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	nd
Kagawa Frei. Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	41	Omura Bay	nd
Kumamoto Pref.	42	, , , , , , , , , , , , , , , , , , ,	nd
		Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref. Kagoshima Pref.	44	Mouth of Riv. Oyodo (Miyazaki City) Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Kagosiiiiia Prei.	45		nd
Olzinovyo Prof	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [14-5] Octabromodiphenyl ethers /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 17/48 (Missing value: 0)
Detection Frequency (sample): 17/48 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.9)
Median	nd
Maximum	26
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(0.9)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	2.1
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(1.8)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	9.7
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(1.8)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	8.8
		Mouth of Riv. Sumida (Minato Ward)	7.0
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(1.8)
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	8.4
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	2.0
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	7.4
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd 4.2
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	6.0
Osaka Fiel. Osaka City	27	Osaka Port	
Hyogo Pref.			tr(1.8)
Kobe City	28	Offshore of Himeji	nd
•	29	Kobe Port (center)	7.8
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
7/ 1:D C		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	26
	35	Offshore of Ube	nd
T. 1	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	tr(0.8)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [14-6] Nonabromodiphenyl ethers /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 25/48 (Missing value: 0) Detection Frequency (sample): 25/48 (Missing value: 0)

	Aggregated value
Geometric mean	tr(8)
Median	tr(5)
Maximum	670
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	tr(9)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	40
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	21
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	17
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	24
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	38
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	65
	13	Mouth of Riv. Sumida (Minato Ward)	48
Yokohama City	14	Yokohama Port	tr(9)
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	tr(4)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	28
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	210
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	24
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	58
Mie Pref.	23	Yokkaichi Port	10
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	80
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	41
Osaka City	27	Osaka Port	36
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	170
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	25
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMETICE.		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	670
r umagaem r rei.	35	Offshore of Ube	18
	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	24
Kagawa Frei. Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	21
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	41	Omura Bay	nd tr(6)
Kumamoto Pref.	-		tr(6)
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [14-7] Decabromodiphenyl ether /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 48/48 (Missing value: 0)
Detection Frequency (sample): 48/48 (Missing value: 0)

	Aggregated value
Geometric mean	89
Median	72
Maximum	5,600
Minimum	tr(7)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	29
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(7)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	46
Akita Pref.	4	Lake Hachiro	83
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	27
Fukushima Pref.	6	Onahama Port	32
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	340
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	130
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	88
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	110
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	270
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	830
	13	Mouth of Riv. Sumida (Minato Ward)	640
Yokohama City	14	Yokohama Port	100
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	67
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	290
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1,100
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	150
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	10
Nagano Pref.		Lake Suwa (center)	28
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	18
Aichi Pref.	22	Nagoya Port	440
Mie Pref.	23	Yokkaichi Port	120
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	40
Kyoto Pref.		Miyazu Port	9
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	1,100
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	350
Osaka City	27	Osaka Port	350
Hyogo Pref.	28	Offshore of Himeji	23
Kobe City	29	Kobe Port (center)	1,300
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	180
Okayama Pref.	31	Offshore of Mizushima	25
Hiroshima Pref.	32	Kure Port	31
	33	Hiroshima Bay	48
Yamaguchi Pref.	34	Tokuyama Bay	5,600
	35	Offshore of Ube	140
	36	Offshore of Hagi	23
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	47
Kagawa Pref.	38	Takamatsu Port	220
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	43
Kitakyushu City	40	Dokai Bay	190
Saga Pref.	41	Imari Bay	14
Nagasaki Pref.	42	Omura Bay	66
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	78
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	53
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	15
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	40
Okinawa Pref.	47	Naha Port	37

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

#### [15] Perfluorooctane sulfonic acid (PFOS) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 46/48 (Missing value: 0)
Detection Frequency (sample): 46/48 (Missing value: 0)

	Aggregated value
Geometric mean	270
Median	220
Maximum	3,600
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	90
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	80
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(70)
Akita Pref.	4	Lake Hachiro	250
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	270
Fukushima Pref.	6	Onahama Port	tr(70)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	840
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	1,500
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	950
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	1,300
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	1,800
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	2,400
	13	Mouth of Riv. Sumida (Minato Ward)	3,600
Yokohama City	14	Yokohama Port	620
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	1,100
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	280
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	100
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	1,700
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	90
Nagano Pref.		Lake Suwa (center)	360
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	110
Aichi Pref.	22	Nagoya Port	700
Mie Pref.	23	Yokkaichi Port	160
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	470
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	2,300
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	3,500
Osaka City	27	Osaka Port	1,600
Hyogo Pref.	28		170
Kobe City	29	Offshore of Himeji Kobe Port (center)	420
Wakayama Pref.		,	
-	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)  Offshore of Mizushima	170
Okayama Pref. Hiroshima Pref.	31	Kure Port	210
rinosiiiila Fici.	32		190
Vomes avechi Duef	33	Hiroshima Bay	170
Yamaguchi Pref.	34	Tokuyama Bay Offshore of Ube	tr(70)
	35		tr(60)
T-11 Df	36	2	90
Tokushima Pref.  Kagawa Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	130
	38	Takamatsu Port	380
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	230
Saga Pref.	41	Imari Bay	tr(30)
Nagasaki Pref.	42	Omura Bay	140
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	440
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	170
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	100
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	300
Okinawa Pref.	47	Naha Port	190

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [16] Perfluorooctanoic acid (PFOA) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 48/48 (Missing value: 0)
Detection Frequency (sample): 48/48 (Missing value: 0)

	Aggregated value
Geometric mean	1,100
Median	980
Maximum	14,000
Minimum	170

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1,300
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	310
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	520
Akita Pref.	4	Lake Hachiro	2,100
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	660
Fukushima Pref.	6	Onahama Port	780
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2,900
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	2,000
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	4,000
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	2,700
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	2,500
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	2,700
	13	Mouth of Riv. Sumida (Minato Ward)	2,600
Yokohama City	14	Yokohama Port	990
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	1,500
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	1,100
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	430
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	14,000
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	370
Nagano Pref.		Lake Suwa (center)	650
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	720
Aichi Pref.	22	Nagoya Port	950
Mie Pref.	23	Yokkaichi Port	630
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	3,400
Kyoto Pref.	25	Miyazu Port	980
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	7,200
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	8,300
Osaka City	27	Osaka Port	7,500
Hyogo Pref.	28	Offshore of Himeji	750
Kobe City	29	Kobe Port (center)	3,200
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,200
Okayama Pref.	31	Offshore of Mizushima	750
Hiroshima Pref.	32	Kure Port	370
	33	Hiroshima Bay	440
Yamaguchi Pref.	34	Tokuyama Bay	270
-	35	Offshore of Ube	360
	36	Offshore of Hagi	1,300
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	580
Kagawa Pref.	38	Takamatsu Port	1,300
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	340
Kitakyushu City	40	Dokai Bay	1,200
Saga Pref.	41	Imari Bay	980
Nagasaki Pref.	42	Omura Bay	950
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	1,200
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	970
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	190
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	430
Okinawa Pref.	47	Naha Port	170

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

## [17] Pentachlorobenzene /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 48/48 (Missing value: 0)
Detection Frequency (sample): 48/48 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.5

	Aggregated value
Geometric mean	4.5
Median	3.5
Maximum	51
Minimum	0.9

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	11
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	2.7
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	2.3
Akita Pref.	4	Lake Hachiro	4.0
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	4.9
Fukushima Pref.	6	Onahama Port	15
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	35
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	6.4
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	51
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	20
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	5.9
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	28
	13	Mouth of Riv. Sumida (Minato Ward)	13
Yokohama City	14	Yokohama Port	3.9
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	6.8
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	19
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	5.4
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	5.1
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	2.2
Nagano Pref.	20	Lake Suwa (center)	12
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	2.4
Aichi Pref.	22	Nagoya Port	23
Mie Pref.	23	Yokkaichi Port	2.2
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	1.7
Kyoto Pref.		Miyazu Port	1.0
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	9.4
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	8.0
Osaka City	27	Osaka Port	6.2
Hyogo Pref.	28	Offshore of Himeji	1.8
Kobe City	29	Kobe Port (center)	2.9
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	3.1
Okayama Pref.	31	Offshore of Mizushima	2.0
Hiroshima Pref.	32	Kure Port	1.5
	33	Hiroshima Bay	1.2
Yamaguchi Pref.	34	Tokuyama Bay	6.0
	35	Offshore of Ube	1.3
	36	Offshore of Hagi	0.9
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	2.1
Kagawa Pref.	38	Takamatsu Port	2.4
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	1.4
Kitakyushu City	40	Dokai Bay	27
Saga Pref.	41	Imari Bay	1.6
Nagasaki Pref.	42	Omura Bay	21
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	3.0
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	2.4
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	1.6
-	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	1.6
Okinawa Pref.	47	Naha Port	1.3

(Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).
Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).
(Note 2) Data treated as detected means detection limit value and more.

#### [19] 1,2,5,6,9,10-Hexabromocyclododecanes /surface water (pg/L)

Monitored year: 2022

 $\label{eq:decomposition} Detection\ Frequency\ (site): 0/48\ (Missing\ value: 0)$   $Detection\ Frequency\ (sample): 0/48\ (Missing\ value: 0)$ 

Detection limit: \*1,200 Quantification limit: \*2,800

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMETICE.		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
r umagaem r rei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	41	Omura Bay	nd nd
Kumamoto Pref.			nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) nd: Not detected

<sup>(</sup>Note 4) \*: Indicates the sum value of the Quantification [Detection] limits of each target chemicals.

## [19-1] $\alpha$ -1,2,5,6,9,10-Hexabromocyclododecane /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 0/48 (Missing value: 0)
Detection Frequency (sample): 0/48 (Missing value: 0)

Detection limit : 200 Quantification limit : 600

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Iwate Pref. Miyagi Pref. Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Gunma Pref. Saitama Pref. Chiba City Tokyo Met.  Yokohama City Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)  Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)  Sendai Bay (Matsushima Bay)  Lake Hachiro  Mouth of Riv. Mogami (Sakata City)  Onahama Port  Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)  Tagawa Kyubun Area Head Works (Utsunomiya City)  Tone-ozeki Weir, Riv. Tone (Chiyoda Town)  Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)  Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd n
Miyagi Pref. Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Gunma Pref. Saitama Pref. Chiba City Tokyo Met.  Yokohama City Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	3 4 5 6 7 8 9 10 11 12 13 14 15 16	Sendai Bay (Matsushima Bay)  Lake Hachiro  Mouth of Riv. Mogami (Sakata City)  Onahama Port  Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)  Tagawa Kyubun Area Head Works (Utsunomiya City)  Tone-ozeki Weir, Riv. Tone (Chiyoda Town)  Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)  Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd n
Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Gunma Pref. Saitama Pref. Chiba City Tokyo Met.  Yokohama City Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	3 4 5 6 7 8 9 10 11 12 13 14 15 16	Sendai Bay (Matsushima Bay)  Lake Hachiro  Mouth of Riv. Mogami (Sakata City)  Onahama Port  Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)  Tagawa Kyubun Area Head Works (Utsunomiya City)  Tone-ozeki Weir, Riv. Tone (Chiyoda Town)  Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)  Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd n
Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Gunma Pref. Saitama Pref. Chiba City Tokyo Met.  Yokohama City Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	5 6 7 8 9 10 11 12 13 14 15 16 17	Mouth of Riv. Mogami (Sakata City) Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Tone-ozeki Weir, Riv. Tone (Chiyoda Town) Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd n
Fukushima Pref.  Ibaraki Pref.  Tochigi Pref. Gunma Pref. Saitama Pref. Chiba City Tokyo Met.  Yokohama City Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	6 7 8 9 10 11 12 13 14 15 16 17	Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Tone-ozeki Weir, Riv. Tone (Chiyoda Town) Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Ibaraki Pref. Tochigi Pref. Gunma Pref. Saitama Pref. Chiba City Tokyo Met.  Yokohama City Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	6 7 8 9 10 11 12 13 14 15 16 17	Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Tone-ozeki Weir, Riv. Tone (Chiyoda Town) Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd nd nd nd nd nd nd nd
Tochigi Pref. Gunma Pref. Saitama Pref. Chiba City Tokyo Met.  Yokohama City Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	8 9 10 11 12 13 14 15 16 17	Tagawa Kyubun Area Head Works (Utsunomiya City)  Tone-ozeki Weir, Riv. Tone (Chiyoda Town)  Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)  Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd nd nd nd nd nd
Gunma Pref. Saitama Pref. Chiba City Tokyo Met.  Yokohama City Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	8 9 10 11 12 13 14 15 16 17	Tagawa Kyubun Area Head Works (Utsunomiya City)  Tone-ozeki Weir, Riv. Tone (Chiyoda Town)  Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)  Mouth of Riv. Hanami (Chiba City)  Mouth of Riv. Arakawa (Koto Ward)  Mouth of Riv. Sumida (Minato Ward)  Yokohama Port  Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd nd nd nd
Saitama Pref. Chiba City Tokyo Met.  Yokohama City Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	10 11 12 13 14 15 16	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd nd nd nd
Chiba City Tokyo Met.  Yokohama City Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	10 11 12 13 14 15 16	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd nd nd
Tokyo Met.  Yokohama City  Kawasaki City  Niigata Pref.  Toyama Pref.  Ishikawa Pref.	11 12 13 14 15 16 17	Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd nd
Yokohama City Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	12 13 14 15 16 17	Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Yokohama City Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	13 14 15 16 17	Mouth of Riv. Sumida (Minato Ward) Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki	
Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	14 15 16 17	Yokohama Port Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Kawasaki City Niigata Pref. Toyama Pref. Ishikawa Pref.	16 17		
Toyama Pref. Ishikawa Pref.	16 17		nd
Toyama Pref. Ishikawa Pref.	17	Lower Riv. Shinano (Niigata City)	nd
Ishikawa Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
	10 1	Mouth of Riv. Sai (Kanazawa City)	nd
		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
		Lake Suwa (center)	nd
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
		Nagoya Port	nd
		Yokkaichi Port	nd
		Lake Biwa (center, offshore of Karasaki)	nd
		Miyazu Port	nd
		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
		Mouth of Riv. Yamato (Sakai City)	nd
		Osaka Port	nd
		Offshore of Himeji	nd
, ,		Kobe Port (center)	nd
		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
		Offshore of Mizushima	nd
-		Kure Port	nd
<u> </u>	-	Hiroshima Bay	nd
		Tokuyama Bay	nd
_		Offshore of Ube	nd
<u> </u>		Offshore of Hagi	nd
		Mouth of Riv. Yoshino (Tokushima City)	nd
		Takamatsu Port	nd
		Mouth of Riv. Shimanto (Shimanto City)	nd
		Dokai Bay	nd
		Imari Bay	nd
		Omura Bay	nd
		Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
		Mouth of Riv. Oyodo (Miyazaki City)	nd
		Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
_		Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	
		Naha Port	nd nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

## [19-2] $\beta$ -1,2,5,6,9,10-Hexabromocyclododecane /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 0/48 (Missing value: 0)
Detection Frequency (sample): 0/48 (Missing value: 0)

Detection limit : 200 Quantification limit : 500

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMETICE.		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
r umagaem r rei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	41	Omura Bay	nd nd
Kumamoto Pref.			nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

# [19-3] $\gamma$ -1,2,5,6,9,10-Hexabromocyclododecane /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 0/48 (Missing value: 0)
Detection Frequency (sample): 0/48 (Missing value: 0)

Detection limit : 300 Quantification limit : 600

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMINA TIO		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
r umagaem r rei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	41	Omura Bay	nd nd
Kumamoto Pref.			nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

## [19-4] $\delta$ -1,2,5,6,9,10-Hexabromocyclododecane /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 0/48 (Missing value: 0)
Detection Frequency (sample): 0/48 (Missing value: 0)

Detection limit : 300 Quantification limit : 700

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMINA TIO		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
r umagaem r rei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	41	Omura Bay	nd nd
Kumamoto Pref.			nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

# [19-5] $\varepsilon$ -1,2,5,6,9,10-Hexabromocyclododecane /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 0/48 (Missing value: 0)
Detection Frequency (sample): 0/48 (Missing value: 0)

Detection limit : 200 Quantification limit : 400

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMETICE.		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
r umagaem r rei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	41	Omura Bay	nd nd
Kumamoto Pref.			nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

#### [21] Hexachlorobuta-1,3-diene/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 0/48 (Missing value: 0)
Detection Frequency (sample): 0/48 (Missing value: 0)

Detection limit: 40 Quantification limit: 100

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
THEOMETICE.		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
r umagaem r rei.	35	Offshore of Ube	nd
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	
Nagasaki Pref.	41	Omura Bay	nd nd
Kumamoto Pref.			nd
	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olsinavya Pf	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

#### [23] Short-chain chlorinated paraffins/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 33/48 (Missing value: 0) Detection Frequency (sample): 33/48 (Missing value: 0)

Detection limit: \*900 Quantification limit: \*2,700

	Aggregated value
Geometric mean	tr(1,000)
Median	tr(1,000)
Maximum	9,600
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(1,200)
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(2,200)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	3,100
Akita Pref.	4	Lake Hachiro	tr(900)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	3,700
Fukushima Pref.	6	Onahama Port	4,700
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(1,300)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(900)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(1,200)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(900)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(1,500)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	tr(900)
	13	Mouth of Riv. Sumida (Minato Ward)	tr(2,000)
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(1,600)
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	25	Miyazu Port	tr(1,200)
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(2,200)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	tr(1,600)
Osaka City	27	Osaka Port	tr(1,600)
Hyogo Pref.	28	Offshore of Himeji	tr(1,000)
Kobe City	29	Kobe Port (center)	tr(900)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(1,200)
Okayama Pref.	31	Offshore of Mizushima	tr(1,800)
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	tr(1,500)
•	35	Offshore of Ube	tr(1,300)
	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	tr(1,700)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	tr(1,500)
Kitakyushu City	40	Dokai Bay	tr(1,000)
Saga Pref.	41	Imari Bay	9,600
Nagasaki Pref.	42	Omura Bay	tr(1,100)
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(1,000)
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(1,000)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(900)
o	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(1,300)
Okinawa Pref.	47	Naha Port	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

<sup>(</sup>Note 5) \*: Indicates the sum value of the Quantification [Detection] limits of each substance with the same number of carbons in the alkyl group.

#### [23-1] Chlorinated decanes/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 47/48 (Missing value: 0) Detection Frequency (sample): 47/48 (Missing value: 0)

Detection limit: 100  $Quantification \ limit: 300$ 

	Aggregated value
Geometric mean	tr(200)
Median	tr(200)
Maximum	1,100
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	300
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(200)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	400
Akita Pref.	4	Lake Hachiro	tr(200)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	700
Fukushima Pref.	6	Onahama Port	600
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	300
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(200)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(200)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(200)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(200)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	tr(200)
	13	Mouth of Riv. Sumida (Minato Ward)	300
Yokohama City	14	Yokohama Port	tr(100)
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	tr(200)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(100)
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(100)
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	tr(200)
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(100)
Nagano Pref.		Lake Suwa (center)	tr(100)
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	300
Aichi Pref.	22	Nagoya Port	tr(200)
Mie Pref.	23	Yokkaichi Port	tr(100)
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	tr(100)
Kyoto Pref.		Miyazu Port	tr(200)
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(200)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(200)
Osaka City	27	Osaka Port	tr(100)
Hyogo Pref.	28	Offshore of Himeji	tr(100)
Kobe City	29	Kobe Port (center)	tr(100)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	300
Hiroshima Pref.		Kure Port	tr(200)
		Hiroshima Bay	tr(200)
Yamaguchi Pref.	34	Tokuyama Bay	tr(200)
8	35	Offshore of Ube	tr(200)
	36	Offshore of Hagi	tr(200)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(200)
Kagawa Pref.	38	Takamatsu Port	tr(200)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	tr(200)
Kitakyushu City	40	Dokai Bay	tr(200)
Saga Pref.	41	Imari Bay	1,100
Nagasaki Pref.	42	Omura Bay	300
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(200)
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(200)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(200)
imgosiiiia i ici.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	300
	40	Gotanida-basin Bridge, Kiv. Gotanda (tellikikusilikilio City)	300

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [23-2] Chlorinated undecanes/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 37/48 (Missing value: 0) Detection Frequency (sample): 37/48 (Missing value: 0)

	Aggregated value
Geometric mean	tr(400)
Median	tr(400)
Maximum	2,200
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(500)
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(500)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(600)
Akita Pref.	4	Lake Hachiro	tr(400)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(800)
Fukushima Pref.	6	Onahama Port	tr(800)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(400)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(400)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(400)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(300)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(400)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	tr(400)
	13	Mouth of Riv. Sumida (Minato Ward)	tr(600)
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(300)
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(600)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	tr(500)
Osaka City	27	Osaka Port	900
Hyogo Pref.	28	Offshore of Himeji	tr(400)
Kobe City	29	Kobe Port (center)	tr(400)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(400)
Okayama Pref.	31	Offshore of Mizushima	tr(500)
Hiroshima Pref.	32	Kure Port	tr(300)
	33	Hiroshima Bay	tr(300)
Yamaguchi Pref.	34	Tokuyama Bay	tr(400)
5	35	Offshore of Ube	tr(400)
		Offshore of Hagi	tr(300)
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	tr(300)
Kagawa Pref.	38	Takamatsu Port	tr(600)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	tr(500)
Kitakyushu City	40	Dokai Bay	tr(400)
Saga Pref.	41	Imari Bay	2,200
Nagasaki Pref.	42	Omura Bay	tr(400)
		Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(400)
Kumamoto Pref	43		1 11(100)
Kumamoto Pref. Miyazaki Pref.	43		\ /
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(400)
			\ /

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples). (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [23-3] Chlorinated dodecanes/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 17/48 (Missing value: 0)
Detection Frequency (sample): 17/48 (Missing value: 0)

Detection limit : 300 Quantification limit : 900

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	2,400
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(400)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	1,000
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	1,000
Fukushima Pref.	6	Onahama Port	1,400
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(300)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(300)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
-	13	Mouth of Riv. Sumida (Minato Ward)	tr(400)
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(300)
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(700)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(400)
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(400)
Okayama Pref.	31	Offshore of Mizushima	tr(300)
Hiroshima Pref.		Kure Port	nd
		Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	tr(400)
	35	Offshore of Ube	tr(400)
	36	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	tr(300)
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	tr(400)
Kitakyushu City	40	Dokai Bay	nd
Saga Pref.	41	Imari Bay	2,400
Nagasaki Pref.	42	Omura Bay	2,400 nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	43	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
120503111110 1 101.	7.5		
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [23-4] Chlorinated tridecanes/surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 47/48 (Missing value: 0) Detection Frequency (sample): 47/48 (Missing value: 0)

	Aggregated value
Geometric mean	tr(400)
Median	tr(400)
Maximum	3,900
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(400)
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	1,100
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	1,100
Akita Pref.	4	Lake Hachiro	tr(300)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	1,200
Fukushima Pref.	6	Onahama Port	1,900
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	600
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(300)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(300)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(400)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	600
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	tr(300)
-	13	Mouth of Riv. Sumida (Minato Ward)	700
Yokohama City	14	Yokohama Port	tr(200)
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	tr(300)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(500)
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(300)
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	tr(400)
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	tr(300)
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	700
Aichi Pref.	22	Nagoya Port	tr(400)
Mie Pref.	23	Yokkaichi Port	tr(200)
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	tr(300)
Kyoto Pref.		Miyazu Port	1,000
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	700
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(500)
Osaka City	27	Osaka Port	600
Hyogo Pref.	28	Offshore of Himeji	tr(500)
Kobe City	29	Kobe Port (center)	tr(400)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(400)
Okayama Pref.	31	Offshore of Mizushima	700
Hiroshima Pref.		Kure Port	tr(300)
		Hiroshima Bay	tr(200)
Yamaguchi Pref.	34	Tokuyama Bay	tr(500)
	35	Offshore of Ube	tr(300)
	36	Offshore of Hagi	tr(200)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(300)
Kagawa Pref.	38	Takamatsu Port	600
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	tr(400)
Kitakyushu City	40	Dokai Bay	tr(400)
Saga Pref.	41	Imari Bay	3,900
Nagasaki Pref.	42	Omura Bay	tr(400)
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(400)
Miyazaki Pref.	43	Mouth of Riv. Oyodo (Miyazaki City)	tr(400)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(400)
imgosiiiia i ici.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(500)
	40	Gotanda-basili Bridge, Kiv. Gotanda (tellikikusilikilio City)	น(300)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [25] Perfluorohexane sulfonic acid (PFHxS) /surface water (pg/L)

Monitored year: 2022

Detection Frequency (site): 42/48 (Missing value: 0)
Detection Frequency (sample): 42/48 (Missing value: 0)

	Aggregated value
Geometric mean	130
Median	120
Maximum	1,800
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(50)
Iwate Pref.	2	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(50)
Akita Pref.	4	Lake Hachiro	tr(60)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	160
Fukushima Pref.	6	Onahama Port	tr(40)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	770
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	880
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	440
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	790
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	400
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	1,400
	13	Mouth of Riv. Sumida (Minato Ward)	1,800
Yokohama City	14	Yokohama Port	260
Kawasaki City	15	Front of Ougi Town, Keihin Canal, Port of Kawasaki	430
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	130
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(60)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1,800
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	130
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(50)
Aichi Pref.	22	Nagoya Port	190
Mie Pref.	23	Yokkaichi Port	tr(40)
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	220
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	1,100
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	970
Osaka City	27	Osaka Port	690
Hyogo Pref.	28	Offshore of Himeji	tr(60)
Kobe City	29	Kobe Port (center)	180
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	70
Okayama Pref.	31	Offshore of Mizushima	110
Hiroshima Pref.		Kure Port	70
Timosiima Tier.		Hiroshima Bay	80
Yamaguchi Pref.	34	Tokuyama Bay	nd
Tamaguem Trei.	35	Offshore of Ube	tr(30)
	36	Offshore of Hagi	tr(30)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(30)
Kagawa Pref.	38	Takamatsu Port	180
Kagawa Frei. Kochi Pref.			
Kitakyushu City	39 40	Mouth of Riv. Shimanto (Shimanto City)	nd 100
Saga Pref.	40	Dokai Bay Imari Bay	100
_			nd
Nagasaki Pref.	42	Omura Bay	130
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	570
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	100
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	120
01: 7: 0	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	140
Okinawa Pref.	47	Naha Port	110

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

## [1] Total Polychlorinated biphenyls (Total PCBs)/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 61/61 (Missing value : 0) Detection Frequency (sample) : 61/61 (Missing value : 0)

	Aggregated value
Geometric mean	4,600
Median	4,800
Maximum	340,000
Minimum	20

Local communities	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	870
	2	Tomakomai Port	4,300
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	220
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	3,200
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	160
Akita Pref.	6	Lake Hachiro	1,500
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	1,500
Fukushima Pref.	8	Onahama Port	17,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1,600
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	250
Chiba Pref.	_	Coast of Ichihara and Anegasaki	20,000
Chiba City		Mouth of Riv. Hanami (Chiba City)	560
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	37,000
Tokyo Met.		Mouth of Riv. Sumida (Minato Ward)	250,000
Yokohama City		Yokohama Port	57,000
	_		
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	33,000
N" , D C	_	Front of Ougi Town, Keihin Canal, Port of Kawasaki	93,000
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	520
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	360
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	5,300
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	8,200
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	360
Nagano Pref.		Lake Suwa (center)	3,700
Shizuoka Pref.		Shimizu Port	11,000
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	460
Aichi Pref.		Kinuura Port	2,300
	27	Nagoya Port	9,400
Mie Pref.	28	Yokkaichi Port	140,000
	29	Toba Port	12,000
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	4,800
	31	Lake Biwa (center, offshore of Karasaki)	8,500
Kyoto Pref.		Miyazu Port	1,400
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	5,100
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	26,000
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	41,000
·	36	Mouth of Riv. Yodo (Osaka City)	29,000
	37	Osaka Port	340,000
	38	Outside Osaka Port	100,000
Hyogo Pref.	39	Offshore of Himeji	10,000
Kobe City	40	Kobe Port (center)	120,000
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	1,100
Wakayama Pref.			12,000
Okayama Pref.	43	Offshore of Mizushima	1,700
Hiroshima Pref.	_	Kure Port	66,000
Timosimila Tier.		Hiroshima Bay	8,800
Yamaguchi Pref.		Tokuyama Bay	3,300
ramagaem rier.	47	Offshore of Ube	4,700
		Offshore of Hagi	950
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	320
Kagawa Pref.	_	3/	56,000
Ehime Pref.	51	Niihama Port	3,900
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	690
Kitakyushu City	53	Dokai Bay	240,000
	_		
Fukuoka City		Hakata Bay	5,900
Saga Pref.		Imari Bay	6,000
Nagasaki Pref.		Omura Bay	4,400
Oita Pref.		Mouth of Riv. Oita (Oita City)	440
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	35
Kagoshima Pref.		Riv. Amori (Kirishima City)	20
	60	Riv. Gotanda (Ichikikushikino City)	23
Okinawa Pref.	61	Naha Port	73,000

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) \*: Indicates the sum value of the Quantification [Detection] limits of each congeners.

## [1-1] Monochlorobiphenyls/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 61/61 (Missing value: 0)
Detection Frequency (sample): 61/61 (Missing value: 0)

	Aggregated value
Geometric mean	23
Median	33
Maximum	2,400
Minimum	tr(0.2)

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	4.4
	2	Tomakomai Port	31
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	0.5
Miyagi Pref.		Sendai Bay (Matsushima Bay)	44
Sendai City		Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(0.2)
Akita Pref.		Lake Hachiro	7.0
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	3.6
Fukushima Pref.	8	Onahama Port	180
Ibaraki Pref.		Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	11
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	0.7
Chiba Pref.		Coast of Ichihara and Anegasaki	54
Chiba City		Mouth of Riv. Hanami (Chiba City)	1.5
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	150
V 1 1 C'		Mouth of Riv. Sumida (Minato Ward)	550 290
Yokohama City		Yokohama Port Mouth of Riv. Tama (Kawasaki City)	32
Kawasaki City		Front of Ougi Town, Keihin Canal, Port of Kawasaki	480
Niigata Pref.		Lower Riv. Shinano (Niigata City)	2.0
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	41
Ishikawa Pref.			8.4
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	2,400
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	3.1
Nagano Pref.		Lake Suwa (center)	22
Shizuoka Pref.		Shimizu Port	41
Silizuoka 11ei.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	89
Aichi Pref.		Kinuura Port	10
Alcin Fici.		Nagoya Port	53
Mie Pref.		Yokkaichi Port	110
ivile i ici.		Toba Port	29
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	23
Singa Tren		Lake Biwa (center, offshore of Karasaki)	30
Kyoto Pref.		Miyazu Port	11
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	23
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	56
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	100
		Mouth of Riv. Yodo (Osaka City)	63
		Osaka Port	570
	38	Outside Osaka Port	440
Hyogo Pref.		Offshore of Himeji	81
Kobe City	40	Kobe Port (center)	130
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	0.4
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	660
Okayama Pref.	43	Offshore of Mizushima	32
Hiroshima Pref.	44	Kure Port	76
	45	Hiroshima Bay	45
Yamaguchi Pref.		Tokuyama Bay	25
		Offshore of Ube	33
	48		5.7
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	1.3
Kagawa Pref.		Takamatsu Port	67
Ehime Pref.		Niihama Port	52
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	4.5
Kitakyushu City		Dokai Bay	510
Fukuoka City		,	35
Saga Pref.	55	Imari Bay	34
Nagasaki Pref.		Omura Bay	35
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	11
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	0.4
Kagoshima Pref.		Riv. Amori (Kirishima City)	0.4
		Riv. Gotanda (Ichikikushikino City)	tr(0.3)
Okinawa Pref.	61	Naha Port	110

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

#### [1-2] Dichlorobiphenyls/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 61/61 (Missing value : 0) Detection Frequency (sample) : 61/61 (Missing value : 0)

	Aggregated value
Geometric mean	200
Median	320
Maximum	10,000
Minimum	tr(0.5)

Local communities	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	58
	2	Tomakomai Port	860
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	3.7
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	310
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	3.4
Akita Pref.	6	Lake Hachiro	24
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	32
Fukushima Pref.	8	Onahama Port	2,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	94
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	15
Chiba Pref.		Coast of Ichihara and Anegasaki	610
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	19
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	1,500
TORYO MEL.		Mouth of Riv. Sumida (Minato Ward)	7,100
V-11	_		1,500
Yokohama City	_	Yokohama Port	
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	650
	_	Front of Ougi Town, Keihin Canal, Port of Kawasaki	2,100
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	18
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	20
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	210
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	2,600
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	28
Nagano Pref.	_	Lake Suwa (center)	78
Shizuoka Pref.		Shimizu Port	730
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	14
Aichi Pref.	26	Kinuura Port	84
<u> </u>	27	Nagoya Port	700
Mie Pref.	28	Yokkaichi Port	1,400
İ	29	Toba Port	220
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	110
1	31	Lake Biwa (center, offshore of Karasaki)	320
Kyoto Pref.	32	Miyazu Port	90
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	410
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	3,300
Osaka City	_	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	1,600
osana eng		Mouth of Riv. Yodo (Osaka City)	1,100
İ		Osaka Port	10,000
İ		Outside Osaka Port	5,900
Hyogo Pref.	39	Offshore of Himeji	780
Kobe City		Kobe Port (center)	2,000
Nara Pref.	_	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	17
Wakayama Pref.			4,900
Okayama Pref.		Offshore of Mizushima	210
Hiroshima Pref.		Kure Port Hiroshima Bay	800 540
Vomegual: De-£			540 160
Yamaguchi Pref.		Tokuyama Bay	
İ		Offshore of Ube	260
m 1 1: D 6		Offshore of Hagi	41
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	13
Kagawa Pref.	_	Takamatsu Port	2,100
Ehime Pref.		Niihama Port	390
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	22
Kitakyushu City	53	Dokai Bay	4,700
Fukuoka City		Hakata Bay	380
Saga Pref.	_	Imari Bay	320
Nagasaki Pref.		Omura Bay	320
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	82
	-	Mouth of Riv. Oyodo (Miyazaki City)	4.5
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	4.3
Miyazaki Pref. Kagoshima Pref.	_	Riv. Amori (Kirishima City)	tr(0.8)
Miyazaki Pref. Kagoshima Pref.	59		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

# [1-3] Trichlorobiphenyls/sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 61/61 \; (Missing \; value: 0) \\ \text{Detection Frequency (sample)}: 61/61 \; (Missing \; value: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	600
Median	690
Maximum	86,000
Minimum	1.0

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	140
	2	Tomakomai Port	580
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	11
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	350
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	16
Akita Pref.	6	Lake Hachiro	81
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	140
Fukushima Pref.	8	Onahama Port	4,400
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	270
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	51
Chiba Pref.		Coast of Ichihara and Anegasaki	3,100
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	93
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	9,600
TORYO MICE.		Mouth of Riv. Sumida (Minato Ward)	52,000
Yokohama City	_	Yokohama Port	7,000
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	4,600
Kawasaki City		Front of Ougi Town, Keihin Canal, Port of Kawasaki	11,000
Nii D	_		75
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	64
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1,200
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1,800
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	42
Nagano Pref.	_	Lake Suwa (center)	330
Shizuoka Pref.		Shimizu Port	2,600
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	49
Aichi Pref.		Kinuura Port	370
	_	Nagoya Port	2,300
Mie Pref.		Yokkaichi Port	6,300
	_	Toba Port	610
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	440
	31	Lake Biwa (center, offshore of Karasaki)	1,100
Kyoto Pref.		Miyazu Port	210
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1,300
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	2,200
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	8,200
	36	Mouth of Riv. Yodo (Osaka City)	5,000
	37	Osaka Port	86,000
	38	Outside Osaka Port	25,000
Hyogo Pref.	39	Offshore of Himeji	2,200
Kobe City	40	Kobe Port (center)	9,200
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	32
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,300
Okayama Pref.		Offshore of Mizushima	300
Hiroshima Pref.	44	Kure Port	3,300
		Hiroshima Bay	1,100
Yamaguchi Pref.		Tokuyama Bay	340
	47	Offshore of Ube	690
		Offshore of Hagi	85
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	46
Kagawa Pref.		Takamatsu Port	18,000
Ehime Pref.	51	Niihama Port	780
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	65
Kitakyushu City	53	Dokai Bay	40,000
Fukuoka City	_	Hakata Bay	1,100
Saga Pref.		Imari Bay	830
	_		650
Nagasaki Pref.		Omura Bay Mouth of Riv. Oite (Oite City)	160
Oita Pref.		Mouth of Riv. Oita (Oita City)	
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	9.6
Kagoshima Pref.		Riv. Amori (Kirishima City)	1.5
011 - 2	60	Riv. Gotanda (Ichikikushikino City)	1.0
Okinawa Pref.	61	Naha Port	3,800

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

## [1-4] Tetrachlorobiphenyls/sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 61/61 \; (Missing \; value: 0) \\ \text{Detection Frequency (sample)}: 61/61 \; (Missing \; value: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	990
Median	1,100
Maximum	120,000
Minimum	4.6

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	190
	2	Tomakomai Port	1,100
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	38
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	560
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	22
Akita Pref.	6	Lake Hachiro	220
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	300
Fukushima Pref.	8	Onahama Port	4,800
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	470
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	63
Chiba Pref.		Coast of Ichihara and Anegasaki	6,200
Chiba City		Mouth of Riv. Hanami (Chiba City)	160
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	14,000
Tokyo Wici.		Mouth of Riv. Sumida (Minato Ward)	100,000
Yokohama City		Yokohama Port	13,000
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	11,000
Kawasaki City			24.000
N" , D C		Front of Ougi Town, Keihin Canal, Port of Kawasaki	,
Niigata Pref.		Lower Riv. Shinano (Niigata City)	130
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	77
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1,800
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	840
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	55
Nagano Pref.		Lake Suwa (center)	810
Shizuoka Pref.		Shimizu Port	2,900
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	100
Aichi Pref.	_	Kinuura Port	690
		Nagoya Port	3,500
Mie Pref.	28	Yokkaichi Port	12,000
	29	Toba Port	1,100
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	1,100
	31	Lake Biwa (center, offshore of Karasaki)	1,800
Kyoto Pref.	32	Miyazu Port	250
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1,300
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	3,700
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	12,000
·	36	Mouth of Riv. Yodo (Osaka City)	7,400
	37	Osaka Port	120,000
	38	Outside Osaka Port	31,000
Hyogo Pref.	39	Offshore of Himeji	2,500
Kobe City	40	Kobe Port (center)	18,000
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	370
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,900
Okayama Pref.	43	Offshore of Mizushima	330
Hiroshima Pref.	_	Kure Port	8,300
Timosimia Tier.		Hiroshima Bay	1,500
Yamaguchi Pref.		Tokuyama Bay	430
ramagacini rici.		Offshore of Ube	1,200
		Offshore of Hagi	120
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	75
Kagawa Pref.		Takamatsu Port	22,000
Ehime Pref.		Niihama Port	810
Kochi Pref.			
	52	Mouth of Riv. Shimanto (Shimanto City)	110
Kitakyushu City	53	Dokai Bay	100,000
Fukuoka City		Hakata Bay	1,800
Saga Pref.		Imari Bay	1,100
Nagasaki Pref.		Omura Bay	840
Oita Pref.		Mouth of Riv. Oita (Oita City)	110
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	8.2
Kagoshima Pref.		Riv. Amori (Kirishima City)	5.1
	60	Riv. Gotanda (Ichikikushikino City)	4.6
Okinawa Pref.	61	Naha Port	8,100

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

#### [1-4-1] 3,3',4,4'-Tetrachlorobiphenyl (#77) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 58/61 (Missing value : 0) Detection Frequency (sample) : 58/61 (Missing value : 0)

	Aggregated value
Geometric mean	21
Median	22
Maximum	2,300
Minimum	nd

Local communities	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	3.2
	2	Tomakomai Port	16
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	0.6
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	13
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	0.5
Akita Pref.	6	Lake Hachiro	8.9
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	6.4
Fukushima Pref.	8	Onahama Port	89
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	11
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	2.0
Chiba Pref.		Coast of Ichihara and Anegasaki	130
Chiba City		Mouth of Riv. Hanami (Chiba City)	3.3
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	330
Tokyo Met.		Mouth of Riv. Sumida (Minato Ward)	2,300
Yokohama City		Yokohama Port	180
	_		86
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	370
NT'' / D C		Front of Ougi Town, Keihin Canal, Port of Kawasaki	
Niigata Pref.		Lower Riv. Shinano (Niigata City)	3.0
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	3.5
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	25
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	7.9
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	2.7
Nagano Pref.		Lake Suwa (center)	29
Shizuoka Pref.		Shimizu Port	73
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	2.2
Aichi Pref.		Kinuura Port	7.6
	_	Nagoya Port	48
Mie Pref.	28	Yokkaichi Port	160
	29	Toba Port	22
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	32
	31	Lake Biwa (center, offshore of Karasaki)	77
Kyoto Pref.		Miyazu Port	6.3
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	26
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	92
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	260
,	36	Mouth of Riv. Yodo (Osaka City)	150
	37	Osaka Port	2,200
	38	Outside Osaka Port	370
Hyogo Pref.		Offshore of Himeji	150
Kobe City		Kobe Port (center)	240
Nara Pref.	_	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	17
Wakayama Pref.		†	470
Okayama Pref.		Offshore of Mizushima	8.1
Hiroshima Pref.		Kure Port	99
		Hiroshima Bay	23
Yamaguchi Pref.		Tokuyama Bay	10
		Offshore of Ube	19
		Offshore of Hagi	3.4
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	1.2
Kagawa Pref.	_	Takamatsu Port	350
Ehime Pref.		Niihama Port	21
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	2.6
Kitakyushu City			1,300
Fukuoka City		Hakata Bay	32
Saga Pref.		Imari Bay	23
Nagasaki Pref.		Omura Bay	21
			1.7
Oita Pref.		Mouth of Riv. Oita (Oita City)	
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd 1
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
Okinawa Pref.		Riv. Gotanda (Ichikikushikino City)	nd
AN D C	61	Naha Port	70

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [1-4-2] 3,4,4',5-Tetrachlorobiphenyl (#81) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 50/61 (Missing value: 0)
Detection Frequency (sample): 50/61 (Missing value: 0)

	Aggregated value
Geometric mean	1.6
Median	1.7
Maximum	130
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	0.4
	2	Tomakomai Port	1.3
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	1.0
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	0.8
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	0.7
Fukushima Pref.	8	Onahama Port	6.3
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	0.8
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	6.1
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(0.2)
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	12
	14	Mouth of Riv. Sumida (Minato Ward)	58
Yokohama City	15	Yokohama Port	14
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	10
		Front of Ougi Town, Keihin Canal, Port of Kawasaki	28
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(0.3)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.			1.8
		Mouth of Riv. Sai (Kanazawa City)	
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	0.7
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	1.8
Shizuoka Pref.		Shimizu Port	4.0
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	0.5
	27	Nagoya Port	2.9
Mie Pref.	28	Yokkaichi Port	14
	29	Toba Port	2.0
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	2.8
oniga i ivii		Lake Biwa (center, offshore of Karasaki)	6.3
Kyoto Pref.		Miyazu Port	0.5
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1.7
			6.0
Osaka Pref.	_	Mouth of Riv. Yamato (Sakai City)	
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	13
		Mouth of Riv. Yodo (Osaka City)	11
		Osaka Port	130
		Outside Osaka Port	24
Hyogo Pref.		Offshore of Himeji	3.6
Kobe City	40	Kobe Port (center)	19
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	0.9
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	2.9
Okayama Pref.	_	Offshore of Mizushima	0.5
Hiroshima Pref.		Kure Port	7.4
		Hiroshima Bay	1.7
Yamaguchi Pref.		Tokuyama Bay	0.7
i amaguem i iti.		Offshore of Ube	1.4
		Offshore of Hagi	tr(0.2)
T 1 1' D C			
Tokushima Pref.	_	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	21
Ehime Pref.		Niihama Port	1.3
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	tr(0.3)
Kitakyushu City		Dokai Bay	95
Fukuoka City		Hakata Bay	2.2
Saga Pref.	55	Imari Bay	1.8
Nagasaki Pref.	56	Omura Bay	1.2
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
ragosiiiila 1 Iti.		Riv. Gotanda (Ichikikushikino City)	nd
Olrimovr D. C			
Okinawa Pref.	61	Naha Port	13

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [1-5] Pentachlorobiphenyls/sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 61/61 \; (Missing \; value: 0) \\ \text{Detection Frequency (sample)}: 61/61 \; (Missing \; value: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	920
Median	980
Maximum	64,000
Minimum	6.3

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	250
	2	Tomakomai Port	730
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	100
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	590
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	38
Akita Pref.	6	Lake Hachiro	580
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	590
Fukushima Pref.	8	Onahama Port	2,600
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	430
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	58
Chiba Pref.	11	Coast of Ichihara and Anegasaki	4,800
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	140
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	6,500
<b>,</b>		Mouth of Riv. Sumida (Minato Ward)	54,000
Yokohama City	15	Yokohama Port	12,000
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	9,900
Tan masanir Orig		Front of Ougi Town, Keihin Canal, Port of Kawasaki	26,000
Niigata Pref.		Lower Riv. Shinano (Niigata City)	150
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	71
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1,100
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	370
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Shoho (Tsutuga City)	110
Nagano Pref.		Lake Suwa (center)	1,100
Shizuoka Pref.		Shimizu Port	1,300
omzaoka i ici.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	100
Aichi Pref.		Kinuura Port	530
ruciii r ter.	_	Nagoya Port	1,600
Mie Pref.		Yokkaichi Port	14,000
WHE I ICI.	29	Toba Port	1,700
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	1,400
Siliga I ICI.		Lake Biwa (center, offshore of Karasaki)	2,500
Kyoto Pref.		Miyazu Port	230
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1,200
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	4,900
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	10,000
Osaka City		Mouth of Riv. Yodo (Osaka City)	7,700
	37	Osaka Port	64,000
		Outside Osaka Port	19,000
Hyogo Pref.		Offshore of Himeii	2,000
Kobe City	40	Kobe Port (center)	20,000
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	370
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,400
Okayama Pref.	43	Offshore of Mizushima	230
Hiroshima Pref.		Kure Port	14,000
mirosiiilia Piei.		Hiroshima Bay	1,600
Yamaguchi Pref.		Tokuyama Bay	480
i amagucili Prei.		Оffshore of Ube	820
			140
Tokushima Pref.	48	Offshore of Hagi	
	_	Mouth of Riv. Yoshino (Tokushima City)	89
Kagawa Pref.	50	Takamatsu Port	7,700
Ehime Pref.		Niihama Port	470
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	170
Kitakyushu City	53	Dokai Bay	53,000
Fukuoka City		Hakata Bay	1,200
Saga Pref.		Imari Bay	980
Nagasaki Pref.		Omura Bay	770
Oita Pref.		Mouth of Riv. Oita (Oita City)	40
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	7.4
Kagoshima Pref.		Riv. Amori (Kirishima City)	7.2
		Riv. Gotanda (Ichikikushikino City)	6.3
Okinawa Pref.	61	Naha Port (site) is based on the number of sites, thus means (the number of detected sites/the number)	10,000

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

#### [1-5-1] 2,3,3',4,4'-Pentachlorobiphenyl (#105) /sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 61/61 \; (Missing \; value: 0) \\ \text{Detection Frequency (sample)}: 61/61 \; (Missing \; value: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	59
Median	61
Maximum	4,100
Minimum	0.6

T 1 1.1		N 22 4 22	
Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	19 57
Innets Duef	2	Tomakomai Port Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	6.6
Iwate Pref. Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	38
Sendai City		Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	2.9
Akita Pref.		Lake Hachiro	38
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	41
Fukushima Pref.	8	Onahama Port	210
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	40
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	5.6
Chiba Pref.		Coast of Ichihara and Anegasaki	290
Chiba City		Mouth of Riv. Hanami (Chiba City)	10
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	310
,		Mouth of Riv. Sumida (Minato Ward)	2,600
Yokohama City		Yokohama Port	810
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	480
		Front of Ougi Town, Keihin Canal, Port of Kawasaki	1,700
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	9.8
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	5.5
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	71
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	23
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	8.5
Nagano Pref.	23	Lake Suwa (center)	60
Shizuoka Pref.	24	Shimizu Port	110
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	7.8
Aichi Pref.		Kinuura Port	23
		Nagoya Port	79
Mie Pref.	28	Yokkaichi Port	600
	29	Toba Port	80
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	110
		Lake Biwa (center, offshore of Karasaki)	210
Kyoto Pref.		Miyazu Port	17
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	64
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	320
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	540
		Mouth of Riv. Yodo (Osaka City)	500
		Osaka Port	4,100
II D C	_	Outside Osaka Port	600
Hyogo Pref.		Offshore of Himeji	120 810
Kobe City Nara Pref.		Kobe Port (center)	61
Wakayama Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	98
Okayama Pref.	_	Offshore of Mizushima	13
Hiroshima Pref.	_	Kure Port	380
riiiosiiiiia Fiei.		Hiroshima Bay	61
Yamaguchi Pref.		Tokuyama Bay	15
i amagucin i ici.		Offshore of Ube	51
		Offshore of Hagi	8.2
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	6.1
Kagawa Pref.		Takamatsu Port	640
Ehime Pref.		Niihama Port	29
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	12
Kitakyushu City		Dokai Bay	4,100
Fukuoka City		Hakata Bay	98
Saga Pref.		Imari Bay	75
Nagasaki Pref.		Omura Bay	48
Oita Pref.		Mouth of Riv. Oita (Oita City)	2.7
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	0.6
Kagoshima Pref.		Riv. Amori (Kirishima City)	0.8
		Riv. Gotanda (Ichikikushikino City)	0.6
Okinawa Pref.		Naha Port	350

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

#### [1-5-2] 2,3,4,4',5-Pentachlorobiphenyl (#114) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 57/61 (Missing value: 0)
Detection Frequency (sample): 57/61 (Missing value: 0)

	Aggregated value
Geometric mean	4.0
Median	3.9
Maximum	320
Minimum	nd

Local communitie	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.5
	2	Tomakomai Port	4.5
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	0.5
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	2.5
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	2.3
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	2.9
Fukushima Pref.	8	Onahama Port	15
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.7
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.3)
Chiba Pref.	_	Coast of Ichihara and Anegasaki	12
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	0.6
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	18
			160
Yokohama City	_	Yokohama Port	48
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	35
	_	Front of Ougi Town, Keihin Canal, Port of Kawasaki	110
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	0.7
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.4)
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	5.2
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.8
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	0.6
Nagano Pref.		Lake Suwa (center)	4.2
Shizuoka Pref.		Shimizu Port	7.2
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	0.5
Aichi Pref.		Kinuura Port	1.3
		Nagoya Port	4.3
Mie Pref.	_	Yokkaichi Port	37
WHE I ICI.		Toba Port	3.9
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	7.4
Siliga Fiel.		Lake Biwa (center, offshore of Karasaki)	14
V4- Df			1.4
Kyoto Pref.		Miyazu Port	3.9
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	23
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	39
		Mouth of Riv. Yodo (Osaka City)	33
		Osaka Port	320
		Outside Osaka Port	31
Hyogo Pref.	39	Offshore of Himeji	7.5
Kobe City	_	Kobe Port (center)	27
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	3.5
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	11
Okayama Pref.	43	Offshore of Mizushima	1.2
Hiroshima Pref.		Kure Port	12
	45	Hiroshima Bay	2.0
Yamaguchi Pref.	46	Tokuyama Bay	1.9
	47	Offshore of Ube	4.1
		Offshore of Hagi	1.0
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(0.4)
Kagawa Pref.	_	Takamatsu Port	48
Ehime Pref.	51	Niihama Port	2.9
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	0.9
Kitakyushu City	53	Dokai Bay	320
Fukuoka City	_	Hakata Bay	5.8
Saga Pref.		Imari Bay	6.1
Nagasaki Pref.		Omura Bay	2.3
Oita Pref.		Mouth of Riv. Oita (Oita City)	tr(0.2)
	1 7/		
		IM	1
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Miyazaki Pref. Kagoshima Pref.	58 59	Riv. Amori (Kirishima City)	nd
	58 59 60	2 \ 2 2/	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

# $\hbox{\tt [1-5-3] 2,3',4,4',5-Pentachlorobiphenyl (\#118)/sediment (pg/g-dry)}$

Monitored year: 2022

Detection Frequency (site) : 61/61 (Missing value : 0) Detection Frequency (sample) : 61/61 (Missing value : 0)

	Aggregated value
Geometric mean	150
Median	150
Maximum	10,000
Minimum	1.1

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	42
	2	Tomakomai Port	110
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	20
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	120
Sendai City		Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	6.8
Akita Pref.		Lake Hachiro	100
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	100
Fukushima Pref.	8	Onahama Port	430
Ibaraki Pref.		Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	74
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	12
Chiba Pref.		Coast of Ichihara and Anegasaki	830
Chiba City		Mouth of Riv. Hanami (Chiba City)	23
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	1,100
		Mouth of Riv. Sumida (Minato Ward)	8,300
Yokohama City		Yokohama Port	2,200
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	1,500
		Front of Ougi Town, Keihin Canal, Port of Kawasaki	5,500
Niigata Pref.		Lower Riv. Shinano (Niigata City)	25
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	13
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	180
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	44
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	20
Nagano Pref.		Lake Suwa (center)	150
Shizuoka Pref.		Shimizu Port	230
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	17
Aichi Pref.		Kinuura Port	79
		Nagoya Port	250
Mie Pref.		Yokkaichi Port	1,700
	29	Toba Port	220
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	260
	31	Lake Biwa (center, offshore of Karasaki)	480
Kyoto Pref.	32	Miyazu Port	42
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	200
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	760
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	1,600
	36	Mouth of Riv. Yodo (Osaka City)	1,300
	37	Osaka Port	10,000
	38	Outside Osaka Port	2,700
Hyogo Pref.	39	Offshore of Himeji	370
Kobe City	40	Kobe Port (center)	2,800
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	72
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	240
Okayama Pref.	43	Offshore of Mizushima	40
Hiroshima Pref.		Kure Port	1,600
	45	Hiroshima Bay	230
Yamaguchi Pref.	46	Tokuyama Bay	59
_	47	Offshore of Ube	130
	48	Offshore of Hagi	25
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	15
Kagawa Pref.	50	Takamatsu Port	1,300
Ehime Pref.		Niihama Port	84
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	29
Kitakyushu City		Dokai Bay	8,300
Fukuoka City		Hakata Bay	260
Saga Pref.		Imari Bay	180
Nagasaki Pref.		Omura Bay	150
Oita Pref.		Mouth of Riv. Oita (Oita City)	6.5
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	1.6
Kagoshima Pref.		Riv. Amori (Kirishima City)	1.6
		Riv. Gotanda (Ichikikushikino City)	1.1
Okinawa Pref.	61	Naha Port	1,200

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

#### [1-5-4] 2',3,4,4',5-Pentachlorobiphenyl (#123) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 55/61 (Missing value : 0) Detection Frequency (sample) : 55/61 (Missing value : 0)

	Aggregated value
Geometric mean	3.3
Median	3.3
Maximum	220
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	0.7
	2	Tomakomai Port	2.8
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(0.4)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	2.4
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	2.0
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	2.1
Fukushima Pref.	8	Onahama Port	10
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.1
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.4)
Chiba Pref.		Coast of Ichihara and Anegasaki	12
Chiba City		Mouth of Riv. Hanami (Chiba City)	0.5
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	17
		Mouth of Riv. Sumida (Minato Ward)	140
Yokohama City	_	Yokohama Port	35
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	24
		Front of Ougi Town, Keihin Canal, Port of Kawasaki	85
Niigata Pref.		Lower Riv. Shinano (Niigata City)	0.5
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	4.1
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.4
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(0.4)
Nagano Pref.	23	Lake Suwa (center)	3.3
Shizuoka Pref.	24	Shimizu Port	6.3
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	0.5
Aichi Pref.		Kinuura Port	1.2
		Nagova Port	4.9
Mie Pref.		Yokkaichi Port	31
11110 1 101.		Toba Port	4.2
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	5.7
Biliga i ici.		Lake Biwa (center, offshore of Karasaki)	11
Kyoto Pref.		Miyazu Port	1.1
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	3.9
			18
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	31
		Mouth of Riv. Yodo (Osaka City)	30
		Osaka Port	210
		Outside Osaka Port	42
Hyogo Pref.		Offshore of Himeji	7.0
Kobe City	_	Kobe Port (center)	42
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	2.0
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	5.1
Okayama Pref.		Offshore of Mizushima	0.7
Hiroshima Pref.		Kure Port	25
	45	Hiroshima Bay	4.7
Yamaguchi Pref.	46	Tokuyama Bay	0.9
	47	Offshore of Ube	3.0
	48	Offshore of Hagi	0.7
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(0.3)
Kagawa Pref.	50	Takamatsu Port	32
Ehime Pref.		Niihama Port	1.9
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	0.7
Kitakyushu City		Dokai Bay	220
Fukuoka City		Hakata Bay	5.9
Saga Pref.		Imari Bay	3.8
Nagasaki Pref.		Omura Bay	3.2
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
011 - 0		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	24

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [1-5-5] 3,3',4,4',5-Pentachlorobiphenyl (#126) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 53/61 (Missing value : 0) Detection Frequency (sample) : 53/61 (Missing value : 0)

	Aggregated value
Geometric mean	2.2
Median	3.1
Maximum	65
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	0.5
Hokkaido	2	Tomakomai Port	4.3
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	1.7
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	_	Lake Hachiro	1.6
Yamagata Pref.		Mouth of Riv. Mogami (Sakata City)	1.0
Fukushima Pref.	8	Onahama Port	14
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1.7
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	9.3
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	0.6
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	20
		Mouth of Riv. Sumida (Minato Ward)	45
Yokohama City	15	Yokohama Port	17
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	6.4
	17	Front of Ougi Town, Keihin Canal, Port of Kawasaki	30
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(0.4)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.2)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	2.1
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	0.5
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	0.5
Nagano Pref.	23	Lake Suwa (center)	3.5
Shizuoka Pref.	24	Shimizu Port	3.1
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(0.4)
Aichi Pref.		Kinuura Port	0.5
	27	Nagoya Port	2.7
Mie Pref.		Yokkaichi Port	15
		Toba Port	3.2
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	9.4
		Lake Biwa (center, offshore of Karasaki)	9.1
Kyoto Pref.		Miyazu Port	0.7
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	0.7
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	24
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	12
		Mouth of Riv. Yodo (Osaka City)	26
		Osaka Port	65
II D C		Outside Osaka Port	10
Hyogo Pref.		Offshore of Himeji	5.4
Kobe City Nara Pref.		Kobe Port (center)	16
Wakayama Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)  Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	7.3
Okayama Pref.		Offshore of Mizushima	0.8
Hiroshima Pref.		Kure Port	10
Tillosiiilla Tiel.		Hiroshima Bay	3.5
Yamaguchi Pref.		Tokuyama Bay	6.7
i amagucin i ici.		Offshore of Ube	6.3
		Offshore of Hagi	0.5
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	12
Ehime Pref.	51	Niihama Port	1.6
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	tr(0.4)
Kitakyushu City	53	Dokai Bay	54
Fukuoka City		Hakata Bay	3.1
Saga Pref.		Imari Bay	3.3
Nagasaki Pref.		Omura Bay	2.1
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		Naha Port	14

Okinawa Pref. 61 Naha Port (Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

# [1-6] Hexachlorobiphenyls/sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 61/61 \; (Missing \; value: 0) \\ \text{Detection Frequency (sample)}: 61/61 \; (Missing \; value: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	830
Median	900
Maximum	42,000
Minimum	4.4

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	180
	2	Tomakomai Port	550
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	62
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	750
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	50
Akita Pref.	6	Lake Hachiro	440
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	400
Fukushima Pref.	8	Onahama Port	1,700
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	240
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	50
Chiba Pref.	11	Coast of Ichihara and Anegasaki	3,700
Chiba City		Mouth of Riv. Hanami (Chiba City)	110
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	3,700
<b>,</b>		Mouth of Riv. Sumida (Minato Ward)	24,000
Yokohama City		Yokohama Port	13,000
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	5,900
Tan masanir Orig		Front of Ougi Town, Keihin Canal, Port of Kawasaki	20,000
Niigata Pref.		Lower Riv. Shinano (Niigata City)	110
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	70
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	670
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	150
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Shoho (Tsutuga City)	97
Nagano Pref.		Lake Suwa (center)	950
Shizuoka Pref.		Shimizu Port	1,500
Silizuoka i ici.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	77
Aichi Pref.		Kinuura Port	410
Alcili I Ici.		Nagoya Port	900
Mie Pref.		Yokkaichi Port	42,000
when then.	29	Toba Port	3,800
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	1,200
Siliga i ici.		Lake Biwa (center, offshore of Karasaki)	2,200
Kyoto Pref.		Miyazu Port	330
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	710
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	6,100
Osaka Piei.		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	7,300
Osaka City		Mouth of Riv. Yodo (Osaka City)	6,100
	37	Osaka Port	42,000
		Outside Osaka Port	14,000
II D£		Offshore of Himeii	
Hyogo Pref.	39 40		1,900
Kobe City Nara Pref.		Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town)	36,000 170
		U / \ \ \ \ \ \ /	
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,200 340
Okayama Pref.	43	Offshore of Mizushima	
Hiroshima Pref.		Kure Port	20,000
1'D C		Hiroshima Bay	2,400
Yamaguchi Pref.		Tokuyama Bay	940
		Offshore of Ube	970
T. 1 . D. C		Offshore of Hagi	270
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	72
Kagawa Pref.		Takamatsu Port	4,300
Ehime Pref.		Niihama Port	630
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	190
Kitakyushu City	53	Dokai Bay	23,000
Fukuoka City		Hakata Bay	900
Saga Pref.		Imari Bay	1,500
Nagasaki Pref.		Omura Bay	1,000
Oita Pref.		Mouth of Riv. Oita (Oita City)	27
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	4.4
Kagoshima Pref.		Riv. Amori (Kirishima City)	4.4
		Riv. Gotanda (Ichikikushikino City)	7.1
Okinawa Pref.	61	Naha Port (site) is based on the number of sites, thus means (the number of detected sites/the number)	24,000

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

#### [1-6-1] 2,3,3',4,4',5-Hexachlorobiphenyl (#156) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 58/61 (Missing value : 0) Detection Frequency (sample) : 58/61 (Missing value : 0)

	Aggregated value
Geometric mean	20
Median	19
Maximum	1,200
Minimum	nd

Hokkaido  Iwate Pref. Miyagi Pref. Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref. Chiba City Tokyo Met.	11 12 13 14	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City) Tomakomai Port Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City) Sendai Bay (Matsushima Bay) Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Lake Hachiro Mouth of Riv. Mogami (Sakata City) Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Coast of Ichihara and Anegasaki Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward)	6.3 12 2.1 13 1.2 14 13 53 7.7 1.5 58 3.2
Miyagi Pref. Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref. Chiba City Tokyo Met. Yokohama City	3 4 5 6 7 8 9 10 11 12 13 14	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City) Sendai Bay (Matsushima Bay) Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Lake Hachiro Mouth of Riv. Mogami (Sakata City) Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Coast of Ichihara and Anegasaki Mouth of Riv. Hanami (Chiba City)	2.1 13 1.2 14 13 53 7.7 1.5 58
Miyagi Pref. Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref. Chiba City Tokyo Met. Yokohama City	4 5 6 7 8 9 10 11 12 13	Sendai Bay (Matsushima Bay) Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Lake Hachiro Mouth of Riv. Mogami (Sakata City) Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Coast of Ichihara and Anegasaki Mouth of Riv. Hanami (Chiba City)	13 1.2 14 13 53 7.7 1.5 58
Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref. Chiba City Tokyo Met.  Yokohama City	5 6 7 8 9 10 11 12 13	Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Lake Hachiro Mouth of Riv. Mogami (Sakata City) Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Coast of Ichihara and Anegasaki Mouth of Riv. Hanami (Chiba City)	1.2 14 13 53 7.7 1.5 58
Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref. Chiba City Tokyo Met.  Yokohama City	6 7 8 9 10 11 12 13	Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Lake Hachiro Mouth of Riv. Mogami (Sakata City) Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Coast of Ichihara and Anegasaki Mouth of Riv. Hanami (Chiba City)	14 13 53 7.7 1.5 58
Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref. Chiba City Tokyo Met. Yokohama City	6 7 8 9 10 11 12 13	Lake Hachiro  Mouth of Riv. Mogami (Sakata City)  Onahama Port  Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)  Tagawa Kyubun Area Head Works (Utsunomiya City)  Coast of Ichihara and Anegasaki  Mouth of Riv. Hanami (Chiba City)	13 53 7.7 1.5 58
Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref. Chiba City Tokyo Met.  Yokohama City	8 9 10 11 12 13 14	Mouth of Riv. Mogami (Sakata City) Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Coast of Ichihara and Anegasaki Mouth of Riv. Hanami (Chiba City)	53 7.7 1.5 58
Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref. Chiba City Tokyo Met. Yokohama City	8 9 10 11 12 13 14	Onahama Port Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Coast of Ichihara and Anegasaki Mouth of Riv. Hanami (Chiba City)	53 7.7 1.5 58
Ibaraki Pref. Tochigi Pref. Chiba Pref. Chiba City Tokyo Met. Yokohama City	9 10 11 12 13 14	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tagawa Kyubun Area Head Works (Utsunomiya City) Coast of Ichihara and Anegasaki Mouth of Riv. Hanami (Chiba City)	7.7 1.5 58
Tochigi Pref. Chiba Pref. Chiba City Tokyo Met.  Yokohama City	10 11 12 13 14	Tagawa Kyubun Area Head Works (Utsunomiya City) Coast of Ichihara and Anegasaki Mouth of Riv. Hanami (Chiba City)	1.5 58
Chiba Pref. Chiba City Tokyo Met.  Yokohama City	11 12 13 14	Coast of Ichihara and Anegasaki Mouth of Riv. Hanami (Chiba City)	58
Chiba City Tokyo Met. Yokohama City	12 13 14	Mouth of Riv. Hanami (Chiba City)	
Tokyo Met. Yokohama City	13 14		
Yokohama City	14		88
		Mouth of Riv. Sumida (Minato Ward)	660
	13	Yokohama Port	280
V1-: C:4	1.0		190
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	
N" · D C		Front of Ougi Town, Keihin Canal, Port of Kawasaki	610
Niigata Pref.		Lower Riv. Shinano (Niigata City)	3.3
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1.7
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	19
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	4.5
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	3.4
Nagano Pref.		Lake Suwa (center)	25
Shizuoka Pref.		Shimizu Port	36
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	2.4
Aichi Pref.	26	Kinuura Port	6.4
	27	Nagoya Port	19
Mie Pref.	28	Yokkaichi Port	550
	29	Toba Port	59
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	38
•	31	Lake Biwa (center, offshore of Karasaki)	89
Kyoto Pref.		Miyazu Port	7.0
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	25
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	140
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	210
Obuna Oity		Mouth of Riv. Yodo (Osaka City)	190
		Osaka Port	1,200
		Outside Osaka Port	310
Hyogo Pref.		Offshore of Himeji	48
Kobe City		Kobe Port (center)	560
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	8.0
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	32
		Offshore of Mizushima	4.3
Okayama Pref.		Kure Port	270
Hiroshima Pref.		Hiroshima Bay	
Vomagual: Df			29 8.9
Yamaguchi Pref.		Tokuyama Bay	
		Offshore of Ube	14
T. 1 . D. C		Offshore of Hagi	4.9
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	1.9
Kagawa Pref.		Takamatsu Port	140
Ehime Pref.		Niihama Port	9.2
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	4.5
Kitakyushu City		Dokai Bay	550
Fukuoka City		Hakata Bay	22
Saga Pref.		Imari Bay	31
Nagasaki Pref.		Omura Bay	18
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	0.8
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		Naha Port	340

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [1-6-2] 2,3,3',4,4',5'-Hexachlorobiphenyl (#157) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 57/61 (Missing value: 0) Detection Frequency (sample): 57/61 (Missing value: 0)

	Aggregated value
Geometric mean	5.4
Median	5.2
Maximum	260
Minimum	nd

Local communities	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.4
	2	Tomakomai Port	3.3
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(0.6)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	3.9
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(0.3)
Akita Pref.	6	Lake Hachiro	3.4
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	3.5
Fukushima Pref.	8	Onahama Port	13
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.5
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.5)
Chiba Pref.		Coast of Ichihara and Anegasaki	19
Chiba City		Mouth of Riv. Hanami (Chiba City)	1.0
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	23
TORYO WICE.		Mouth of Riv. Sumida (Minato Ward)	160
Yokohama City		Yokohama Port	63
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	44
Kawasaki City		Front of Ougi Town, Keihin Canal, Port of Kawasaki	140
Nii D	_		0.8
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.6)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	5.2
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.2
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	0.9
Nagano Pref.		Lake Suwa (center)	6.9
Shizuoka Pref.		Shimizu Port	8.1
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(0.6)
Aichi Pref.		Kinuura Port	1.9
		Nagoya Port	5.7
Mie Pref.		Yokkaichi Port	77
		Toba Port	9.7
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	11
	31	Lake Biwa (center, offshore of Karasaki)	20
Kyoto Pref.		Miyazu Port	2.0
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	6.8
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	34
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	57
	36	Mouth of Riv. Yodo (Osaka City)	52
		Osaka Port	260
	38	Outside Osaka Port	75
Hyogo Pref.	39	Offshore of Himeji	14
Kobe City	40	Kobe Port (center)	110
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	1.9
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	8.1
Okayama Pref.		Offshore of Mizushima	1.2
Hiroshima Pref.	44	Kure Port	61
	45	Hiroshima Bay	8.5
Yamaguchi Pref.		Tokuyama Bay	2.5
Ü	47	Offshore of Ube	3.5
		Offshore of Hagi	1.2
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(0.5)
Kagawa Pref.	50	Takamatsu Port	34
Ehime Pref.	_	Niihama Port	2.7
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	1.1
Kitakyushu City		Dokai Bay	120
Fukuoka City	_	Hakata Bay	6.0
Saga Pref.		Imari Bay	7.5
Nagasaki Pref.	_	Omura Bay	4.5
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Ovad (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
ragosiiiila 1 ICI.		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		Naha Port	65
(Note 1) Detection for	UI	[Nama Polt]	0.5

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

# [1-6-3] 2,3',4,4',5,5'-Hexachlorobiphenyl (#167) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 58/61 (Missing value : 0) Detection Frequency (sample) : 58/61 (Missing value : 0)

	Aggregated value
Geometric mean	9.0
Median	8.9
Maximum	440
Minimum	nd

Local communities	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	2.4
	2	Tomakomai Port	4.4
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	0.9
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	7.2
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(0.5)
Akita Pref.	6	Lake Hachiro	6.3
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	5.4
Fukushima Pref.	8	Onahama Port	21
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	3.3
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	0.8
Chiba Pref.	11	Coast of Ichihara and Anegasaki	34
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	1.4
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	40
	14	Mouth of Riv. Sumida (Minato Ward)	270
Yokohama City	15	Yokohama Port	120
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	77
,		Front of Ougi Town, Keihin Canal, Port of Kawasaki	270
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	1.5
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	0.9
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	7.8
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.9
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	1.4
Nagano Pref.		Lake Suwa (center)	9.5
Shizuoka Pref.		Shimizu Port	14
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	1.0
Aichi Pref.	_	Kinuura Port	3.2
		Nagoya Port	9.2
Mie Pref.		Yokkaichi Port	200
		Toba Port	20
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	16
Singa 11011		Lake Biwa (center, offshore of Karasaki)	28
Kyoto Pref.	_	Miyazu Port	2.8
Kyoto City	_		10
Osaka Pref.	_	· · · · · · · · · · · · · · · · · · ·	59
Osaka City	_	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	91
Osuku City		Mouth of Riv. Yodo (Osaka City)	84
		Osaka Port	440
		Outside Osaka Port	120
Hyogo Pref.		Offshore of Himeji	23
Kobe City		Kobe Port (center)	230
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	2.6
Wakayama Pref.			15
Okayama Pref.		Offshore of Mizushima	2.4
Hiroshima Pref.		Kure Port	130
Timosiiiiia Tici.		Hiroshima Bay	16
Yamaguchi Pref.		Tokuyama Bay	4.5
Tamaguem Tier.		Offshore of Ube	7.0
		Offshore of Hagi	2.3
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(0.7)
Kagawa Pref.	_	Takamatsu Port	57
Ehime Pref.		Niihama Port	4.6
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	2.0
Kitakyushu City		Dokai Bay	210
Fukuoka City	_	Hakata Bay	11
Saga Pref.		Imari Bay	14
		Omura Bay	8.9
Nagasaki Pref. Oita Pref.		Mouth of Riv. Oita (Oita City)	tr(0.4)
Miyazaki Pref.		Mouth of Riv. Oydo (Miyazaki City)	nd
	_		nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	
Okinarya Dr-f		Riv. Gotanda (Ichikikushikino City)	nd 170
Okinawa Pref.	61	Naha Port	1/0

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [1-6-4] 3,3',4,4',5,5'-Hexachlorobiphenyl (#169) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 40/61 (Missing value : 0) Detection Frequency (sample) : 40/61 (Missing value : 0)

	Aggregated value
Geometric mean	0.8
Median	0.8
Maximum	43
Minimum	nd

Chiba Pref.         11           Chiba City         12           Tokyo Met.         13           14         Yokohama City         15           Kawasaki City         16           17         Niigata Pref.         18           Toyama Pref.         19         Ishikawa Pref.         20           Fukui Pref.         21         Yamanashi Pref.         22           Nagano Pref.         23         Shizuoka Pref.         24           25         Aichi Pref.         26         27           Mie Pref.         28         29           Shiga Pref.         30         31           Kyoto Pref.         32         Kyoto City         33           Osaka City         35         36           37         38           Hyogo Pref.         39	Yokohama Port  Mouth of Riv. Tama (Kawasaki City)  Front of Ougi Town, Keihin Canal, Port of Kawasaki  Lower Riv. Shinano (Niigata City)  Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)  Mouth of Riv. Sai (Kanazawa City)  Mishima-bashi Bridge, Riv. Shono (Tsuruga City)  Senshu-bashi Bridge, Riv. Arakawa (Kofu City)  Lake Suwa (center)  Shimizu Port  Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)  Kinuura Port  Nagoya Port	nd tr(0.6) nd 1.0 nd 1.0 nd tr(0.5) nd 1.5 nd nd 1.9 nd 1.8 13 7.8 0.9 9.1 nd nd tr(0.5) nd nd tr(0.5) nd nd tr(0.5) nd nd tr(0.5) nd nd tr(0.5) nd nd tr(0.5) nd nd tr(0.5) nd nd tr(0.7) nd nd tr(0.4)
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Toyama Pref.         19           Ishikawa Pref.         20           Fukui Pref.         21           Yamanashi Pref.         22           Nagano Pref.         23           Shizuoka Pref.         24           25         26           27         28           29         29           Shiga Pref.         30           31         31           Kyoto Pref.         32           Kyoto City         33           Osaka Pref.         34           Osaka City         35           36         37           38         Hyogo Pref.         39           Kobe City         40	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Lake Suwa (center) Shimizu Port Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port Nagoya Port	nd tr(0.5) nd nd 1.7 1.1
Ishikawa Pref.     20       Fukui Pref.     21       Yamanashi Pref.     22       Nagano Pref.     23       Shizuoka Pref.     24       25     26       27     28       29     30       31     31       Kyoto Pref.     32       Kyoto City     33       Osaka Pref.     34       Osaka City     35       36     37       38     Hyogo Pref.     39       Kobe City     40	Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Lake Suwa (center) Shimizu Port Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port Nagoya Port	tr(0.5) nd nd 1.7 1.1 nd
Fukui Pref.         21           Yamanashi Pref.         22           Nagano Pref.         23           Shizuoka Pref.         24           25         26           27         28           29         30           31         31           Kyoto Pref.         32           Kyoto City         33           Osaka Pref.         34           Osaka City         35           36         37           38         Hyogo Pref.         39           Kobe City         40	Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Lake Suwa (center) Shimizu Port Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port Nagoya Port	nd nd 1.7 1.1 nd
Fukui Pref.         21           Yamanashi Pref.         22           Nagano Pref.         23           Shizuoka Pref.         24           25         26           27         28           29         29           Shiga Pref.         30           31         31           Kyoto Pref.         32           Kyoto City         33           Osaka Pref.         34           Osaka City         35           36         37           38         Hyogo Pref.         39           Kobe City         40	Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Lake Suwa (center) Shimizu Port Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port Nagoya Port	nd nd 1.7 1.1 nd
Yamanashi Pref.     22       Nagano Pref.     23       Shizuoka Pref.     24       25     25       Aichi Pref.     26       27     28       29     30       31     31       Kyoto Pref.     32       Kyoto City     33       Osaka Pref.     34       Osaka City     35       36     37       38     Hyogo Pref.     39       Kobe City     40	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)  Lake Suwa (center)  Shimizu Port  Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)  Kinuura Port  Nagoya Port	1.7 1.1 nd
Nagano Pref.         23           Shizuoka Pref.         24           25         26           Aichi Pref.         26           27         28           29         30           31         31           Kyoto Pref.         32           Kyoto City         33           Osaka Pref.         34           Osaka City         35           36         37           38         Hyogo Pref.         39           Kobe City         40	Lake Suwa (center) Shimizu Port Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port Nagoya Port	1.7 1.1 nd
Shizuoka Pref.         24           25         25           Aichi Pref.         26           27         28           29         29           Shiga Pref.         30           31         31           Kyoto Pref.         32           Kyoto City         33           Osaka Pref.         34           Osaka City         35           36         37           38         Hyogo Pref.         39           Kobe City         40	Shimizu Port Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port Nagoya Port	1.1 nd
25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port Nagoya Port	nd
Aichi Pref.     26       27     27       Mie Pref.     28       29     30       31     31       Kyoto Pref.     32       Kyoto City     33       Osaka Pref.     34       Osaka City     35       36     37       38     39       Kobe City     40	Kinuura Port Nagoya Port	
27   Mie Pref.   28   29     29     30     31     Kyoto Pref.   32   Kyoto City   33   Osaka Pref.   34   Osaka City   35   36   37   38   Hyogo Pref.   39   Kobe City   40	Nagoya Port	
Mie Pref.     28       29     Shiga Pref.     30       31     Kyoto Pref.     32       Kyoto City     33       Osaka Pref.     34       Osaka City     35       36     37       38     Hyogo Pref.     39       Kobe City     40		tr(0.6)
29   Shiga Pref.   30   31   Kyoto Pref.   32   Kyoto City   33   Osaka Pref.   34   Osaka City   35   36   37   38   Hyogo Pref.   39   Kobe City   40		43
Shiga Pref.     30       31     Kyoto Pref.     32       Kyoto City     33       Osaka Pref.     34       Osaka City     35       36     37       38     Hyogo Pref.     39       Kobe City     40	Yokkaichi Port	2.2
31   Kyoto Pref.   32   Kyoto City   33   Osaka Pref.   34   Osaka City   35   36   37   38   Hyogo Pref.   39   Kobe City   40		
Kyoto Pref.         32           Kyoto City         33           Osaka Pref.         34           Osaka City         35           36         37           38         Hyogo Pref.         39           Kobe City         40	Lake Biwa (center, offshore of Minamihira)	2.4
Kyoto City     33       Osaka Pref.     34       Osaka City     35       36     37       38     39       Kobe City     40	Lake Biwa (center, offshore of Karasaki)	1.7
Osaka Pref.     34       Osaka City     35       36     37       38     39       Kobe City     40	Miyazu Port	tr(0.3)
Osaka City 35 36 37 38 Hyogo Pref. 39 Kobe City 40		nd
36   37   38   Hyogo Pref.   39   Kobe City   40	Mouth of Riv. Yamato (Sakai City)	4.7
37   38   Hyogo Pref.   39   Kobe City   40	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	2.8
38   Hyogo Pref.   39   Kobe City   40	Mouth of Riv. Yodo (Osaka City)	2.1
Hyogo Pref. 39 Kobe City 40		13
Kobe City 40	Outside Osaka Port	3.4
	Offshore of Himeji	1.6
Nara Pref. 41	Kobe Port (center)	17
	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref. 42		1.5
Okayama Pref. 43		tr(0.4)
,	Kure Port	17
	Hiroshima Bay	1.3
	Tokuyama Bay	0.8
47	Offshore of Ube	0.8
	Offshore of Hagi	nd
	Mouth of Riv. Yoshino (Tokushima City)	
	\	nd
	Takamatsu Port	2.6
Ehime Pref. 51	Niihama Port	tr(0.7)
Kochi Pref. 52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City 53	,	20
Fukuoka City 54	<b>y</b>	tr(0.7)
- C	Imari Bay	1.2
	Omura Bay	0.8
		nd
Miyazaki Pref. 58	Mouth of Riv. Oita (Oita City)	nd
Kagoshima Pref. 59		nd
60	Mouth of Riv. Oita (Oita City)	
Okinawa Pref. 61	Mouth of Riv. Oita (Oita City)  Mouth of Riv. Oyodo (Miyazaki City)  Riv. Amori (Kirishima City)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

# [1-7] Heptachlorobiphenyls/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 61/61 (Missing value : 0)
Detection Frequency (sample) : 61/61 (Missing value : 0)

	Aggregated value
Geometric mean	320
Median	380
Maximum	49,000
Minimum	tr(0.5)

Hokkarido				T
Name   Prof.   3   Toyosawa-bash Bridge, Riv. Toyosawa (Hanamaki City)   7.7	Local communities	No.	Monitored sites	Aggregated value
Invase Pref.   3   Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)   7.7	Hokkaido			
Miyaga Pref.   4   Sendai Bay (Matsushima Bay)   23	It- Do-f			
Sendai City   5   Hirose-ohashi Bridge, Riv. Hirose (Sendai City)   23     Aktia Pref.   6   Lake Hachiro   96     Yamagara Bref.   7   Mouth of Riv. Mogami (Sakata City)   66     Daraka Pref.   9   Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)   58     Tochiaj Pref.   10   Tagawa Kyubun Area Head Works (Usunomiya City)   12     Chiba Pref.   11   Coast of Ichibara and Anagasaki   1,000     Chiba City   12   Mouth of Riv. Hanami (Chiba City)   31     Tokyo Met.   13   Mouth of Riv. Anakawa (Koto Ward)   1,100     Yokohama City   15   Yokohama Port   8,300     Kawasaki City   16   Mouth of Riv. Tamawa (Koto Ward)   1,000     Yokohama City   17   Front of Ougl Town, Kehini Canal, Port of Kawasaki City)   1,000     Yokohama City   18   Lower Riv. Shinano (Niigata City)   26     Tozuana Pref.   18   Lower Riv. Shinano (Niigata City)   26     Tozuana Pref.   19   Hagiur-sabai Bridge, Mouth of Riv. Junsus (Troy and Pref. Shikawa Pref.   20   Mouth of Riv. Sair (Kanazawa City)   240     Yamanabi Pref.   21   Mishima bash Bridge, Riv. Shono (Tsurusa City)   58     Yamanabi Pref.   22   Sanshu-bashi Bridge, Riv. Arakawa (Kofu City)   18     Nagano Pref.   23   Lake Suwa center)   25   Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)   28     Akichi Pref.   26   Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)   28     Akichi Pref.   27   Nagoya Port   300     Mie Pref.   28   Yokakichi Port   490,000     29   Toba Port   30   Lake Biwa (center)   37,000     Shiga Pref.   30   Lake Biwa (center, offshore of Minamihira)   360     Shiga Pref.   30   Cake Biwa (center, offshore of Minamihira)   360     Shiga Pref.   31   Mishama Port   49,000     Alae Biwa (center, offshore of Minamihira)   30,000     Shiga Pref.   32   Kimara Shi Bridge, Riv. Masura (Koto City)   1,200     Shiga Pref.   33   Cokaka Dort   17,000     Shiga Pref.   34   Mouth of Riv. Shima (Oska City)   1,200     Shiga Pref.   35   Cokaka Dort   1,200     Shiga Pref.   36   Offshore of Haigi   720     Shimara Pref.   47   Offshore of Minamihira				
Akita Pref.   6   lake Hachiro   96   Fukushima Pref.   7   Mouth of Riv. Mogami (Sakata City)   66   Fukushima Pref.   8   0   0   0   0   0   0   Fukushima Pref.   9   0   0   0   0   0   0   Fukushima Pref.   10   0   0   0   0   0   0   Fukushima Pref.   10   1   0   0   0   0   0   0   Fukushima Pref.   10   1   0   0   0   0   0   0   0   Fukushima Pref.   11   0   0   0   0   0   0   0   0	, ,			
Yamazana Pref.   7				
Fukushima Pref.   8				
				_
Tochig Pref.   10   Tagawa Kyubun Area Head Works (Usunomiya City)   12   12   12   13   14   16   16   16   16   16   16   16				
Chiba Perf.	Tochigi Pref.			
Tokyo Met.	Chiba Pref.	11	Coast of Ichihara and Anegasaki	1,600
1.100   1.10	Chiba City	12	Mouth of Riv. Hanami (Chiba City)	31
Yokohama City         15         Vokohama Port         8,300           Kawasaki City         16         Mouth of Riv. Tama (Kawasaki City)         1,000           Niigata Pref.         18         Lower Riv. Shinano (Niigata City)         26           Tozyama Pref.         19         Hajura-bashi Bridge, Mouth of Riv. Jinista (Toyama City)         17           Ishikawa Pref.         20         Mouth of Riv. Sai (Kanazawa City)         240           Yamanashi Pref.         21         Mishima-bashi Bridge, Riv. Shono (Tsuruga City)         58           Yamanashi Pref.         22         Senshu-bashi Bridge, Riv. Arakawa (Kofu City)         18           Nagano Pref.         23         Lake Suwa (center)         290           Shizuoka Pref.         24         Shimizu Port         1,200           25         Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)         28           Aichi Pref.         26         Kinuura Port         170           Mie Pref.         28         Yokakachi Port         49,000           27         Nagoya Port         30         Lake Biwa (center, offshore of Minamihira)         30         30           Mispa Pref.         30         Lake Biwa (center, offshore of Karasaki)         470         470           Kyoto City	Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	1,100
Kawasaki City         16         Mouth of Riv. Tama (Kawasaki City)         1,000           Nijgata Pref.         18         Lower Riv. Shinano (Nijgata City)         26           Toyama Pref.         19         Hagiura-bashi Bridge, Mouth of Riv. Jinistu (Toyama City)         17           Shikawa Pref.         20         Mouth of Riv. Sai (Kanazawa City)         240           Fikui Pref.         21         Mishima-bashi Bridge, Riv. Shono (Tsuruga City)         58           Yamanashi Pref.         22         Senshu-bashi Bridge, Riv. Arakawa (Kofu City)         18           Nagano Pref.         23         Lake Suwa (center)         290           Shizuoka Pref.         24         Shimizu Port         1,200           Shizuoka Pref.         24         Shimizu Port         1,200           Aichi Pref.         26         Kincura Port         170           7         Nagoya Port         49,000           Mie Pref.         28         Yokakichi Port         49,000           29         Toba Port         30         Lake Biwa (center, offshore of Minamihira)         360           Shiga Pref.         30         Lake Biwa (center, offshore of Karasaki)         470           Kyoto City         33         Miyazu Port         180 <tr< td=""><td>-</td><td>14</td><td>Mouth of Riv. Sumida (Minato Ward)</td><td></td></tr<>	-	14	Mouth of Riv. Sumida (Minato Ward)	
17   Front of Oug' Town, Keihin Canal, Port of Kawasaki   7,100	Yokohama City	15	Yokohama Port	8,300
Niigata Pref.   18   Lower Riv. Shinano (Niigata City)   26   Tovama Pref.   19   Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Tovama City)   240   2	Kawasaki City			
Toyama Pref.   9				
Ishikawa Pref.         20         Mouth of Riv. Sai (Kanazawa City)         240           Yamanashi Pref.         21         Mishima-bashi Bridge, Riv. Shono (Tsuruga City)         58           Yamanashi Pref.         22         Senshu-bashi Bridge, Riv. Arakawa (Kofu City)         18           Nagano Pref.         23         Lake Suwa (center)         290           Shizuoka Pref.         24         Shimizu Port         1,200           Aichi Pref.         24         Kimizu Port         170           Aichi Pref.         26         Kinuura Port         300           27         Nagayoa Port         300           Mie Pref.         28         Yokkaichi Port         49,000           Shiga Pref.         30         Lake Biwa (center, offshore of Minamihira)         360           Shiga Pref.         30         Lake Biwa (center, offshore of Minamihira)         360           Kyoto Pref.         32         Miyawa Port         180           Kyoto City         33         Miyama-bashi Bridge, Riv. Katsura (Kyoto City)         130           Osaka Pref.         34         Muth of Riv. Yamato (Saka City)         1,700           Osaka Pref.         34         Muth of Riv. Yamato (Saka City)         1,700           Abasa Port				
Fukui Pref.   21   Mishima-bashi Bridge, Riv. Shono (Tsuruga City)   18				
Yamanashi Pref.         22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City)         18           Nagano Pref.         23 Lake Suwa (center)         290           Shizuzoka Pref.         24 Shimizu Port         1,200           Aichi Pref.         26 Kinuura Port         170           72 Nagoya Port         300           Mie Pref.         28 Yokkaichi Port         49,000           29 Toba Port         3,700           Shiga Pref.         30 Lake Biwa (center, offshore of Minamihira)         360           Kyoto Pref.         32 Miyamae Lake Genter, offshore of Karasaki)         470           Kyoto Pref.         33 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)         130           Osaka Pref.         34 Mouth of Riv. Yamato (Sakai City)         130           Osaka City         35 Kema-bashi Bridge, Riv. Ok-kawa (Osaka City)         1,700           36 Mouth of Riv. Yodo (Osaka City)         1,700           37 Osaka Port         17,000           38 Outside Osaka Port         6,300           Hyogo Pref.         40 Kobe Port (center)           39 Offshore of Himeji         720           Kobe City         40 Kobe Port (center)           41 Taisho-bashi Bridge, Riv. Yamato (Oji Town)         84           Wakayama Pref.         41 Kinckawa-ohashi Brid				_
Nagano Pref.         23         Lake Suwa (center)         290           Shizuoka Pref.         24         Shimizu Port         1,200           25         Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)         28           Aichi Pref.         26         Kinuura Port         170           27         Nagoya Port         300           Mie Pref.         28         Yokkaichi Port         49,000           29         Toba Port         3,700           Shiga Pref.         30         Lake Biwa (center, offshore of Minamihira)         360           Kyoto Pref.         32         Miyaza Port         180           Kyoto City         33         Miyaza Port         180           Kyoto City         33         Miyaza Port         180           Syoto City         34         Mouth of Riv. Yamato (Sakai City)         130           Osaka Pref.         34         Mouth of Riv. Yamato (Sakai City)         1,700           Osaka Port         35         Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         1,700           38         Outside Osaka Port         17,000         38           Kobe City         40         Kobe Cott (center)         30,000           Nara Pref.         41         Ki				
Shizuoka Pref.   24   Shimizu Port   1,200   25   Kaketsuk-bashi Bridge, Riv. Tenryu (Iwata City)   28   Caketsuk-bashi Bridge, Riv. Tenryu (Iwata City)   170				
25   Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)   28				
Aichi Pref.         26         Kinuura Port         170           27         Nagoya Port         300           Mie Pref.         28         Yokkaichi Port         49,000           29         Toba Port         3,700           Shiga Pref.         30         Lake Biwa (center, offshore of Minamihira)         360           31         Lake Biwa (center, offshore of Karasaki)         470           Kyoto Pref.         32         Miyazar Port         180           Kyoto City         33         Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)         130           Osaka Pref.         34         Mouth of Riv. Yamato (Sakai City)         4,200           Osaka City         35         Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         1,700           36         Mouth of Riv. Yodo (Osaka City)         1,700           37         Osaka Port         17,000           38         Outside Osaka Port         6,300           Hyogo Pref.         39         Offshore of Himeji         720           Kobe City         40         Kobe Port (center)         30,000           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         84           Wakayama Pref.         42         Kinokawa-ohashi Brid	Shizuoka Pref.			
Mie Pref.   28   Yokkaichi Port   49,000   49,000   29   Toba Port   3,700   3,700   36   30   48   Biwa (center, offshore of Minamihira)   360   31   Lake Biwa (center, offshore of Karasaki)   470   470   180   47	1:1:D C		, , , , , , , , , , , , , , , , , , ,	
Mie Pref.         28 Yokkaichi Port         49,000           29 Toba Port         3,700           Shiga Pref.         30 Lake Biwa (center, offshore of Minamihira)         360           31 Lake Biwa (center, offshore of Karasaki)         470           Kyoto Pref.         32 Miyazu Port         180           Kyoto City         33 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)         130           Osaka Pref.         34 Mouth of Riv. Yamato (Sakai City)         4,200           Osaka City         35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         1,700           36 Mouth of Riv. Yodo (Osaka City)         1,700           37 Osaka Port         17,000           38 Outside Osaka Port         17,000           Kobe City         40 Kobe Port (center)         30,000           Nara Pref.         41 Taisho-bashi Bridge, Riv. Yamato (Oji Town)         84           Wakayama Pref.         41 Taisho-bashi Bridge, Riv. Yamato (Oji Town)         84           Wakayama Pref.         42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         460           Okayama Pref.         43 Kure Port         15,000           Hiroshima Pref.         44 Kure Port         15,000           Yamaguchi Pref.         45 Hiroshima Bay         1,300           Yamaguchi Pref. </td <td>Aichi Pref.</td> <td></td> <td></td> <td></td>	Aichi Pref.			
29   Toba Port   3,700   3,700   3,700   360   Lake Biwa (center, offshore of Minamihira)   360   36	Mio Duof			
Shiga Pref.   30	Mie Piei.			. ,
Syoto Pref.   32   Miyazau Port   180	Shiga Prof			
Kyoto Pref.         32         Miyazu Port         180           Kyoto City         33         Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)         130           Osaka Pref.         34         Mouth of Riv. Yamato (Sakai City)         4,200           Osaka City         35         Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         1,700           36         Mouth of Riv. Yodo (Osaka City)         1,400           37         Osaka Port         17,000           40         Sobe Osaka Port         6,300           Hyogo Pref.         39         Offshore of Himeji         720           Kobe City         40         Kobe Port (center)         30,000           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         84           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         460           Okayama Pref.         43         Offshore of Mizushima         200           Hiroshima Pref.         44         Kure Port         15,000           4         Kure Port         15,000           47         Offshore of Ube         560           48         Offshore of Hagi         220           Tokushima Pref.         49         Mouth of	Siliga I Ici.			
Kyoto City         33         Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)         130           Osaka Pref.         34         Mouth of Riv. Yamato (Sakai City)         4,200           Osaka City         35         Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         1,400           36         Mouth of Riv. Yodo (Osaka City)         11,400           37         Osaka Port         17,000           38         Outside Osaka Port         6,300           Hyogo Pref.         39         Offshore of Himeji         720           Kobe City         40         Kobe Port (center)         30,000           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         84           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         460           Okayama Pref.         43         Offshore of Mizushima         200           Hiroshima Pref.         44         Kure Port         15,000           45         Hiroshima Bay         1,300           Yamaguchi Pref.         46         Tokuyama Bay         710           47         Offshore of Hagi         220           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         21	Kyoto Pref			
Osaka Pref.         34         Mouth of Riv. Yamato (Sakai City)         4,200           Osaka City         35         Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         1,700           36         Mouth of Riv. Yodo (Osaka City)         1,400           37         Osaka Port         17,000           38         Outside Osaka Port         6,300           Hyogo Pref.         39         Offshore of Himeji         720           Kobe City         40         Kobe Port (center)         30,000           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         84           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         460           Okayama Pref.         43         Offshore of Mizushima         200           Hiroshima Pref.         44         Kure Port         15,000           45         Hiroshima Bay         1,300           Yamaguchi Pref.         46         Tokuyama Bay         710           47         Offshore of Ube         560           48         Offshore of Hagi         220           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         21           Kagawa Pref.         50         Taka			-	
Osaka City         35         Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         1,700           36         Mouth of Riv. Yodo (Osaka City)         1,400           37         Osaka Port         17,000           48         Outside Osaka Port         6,300           Hyogo Pref.         39         Offshore of Himeji         720           Kobe City         40         Kobe Port (center)         30,000           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         84           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         460           Okayama Pref.         43         Offshore of Mizushima         200           Hiroshima Pref.         44         Kure Port         15,000           45         Hiroshima Bay         1,300           Yamaguchi Pref.         46         Tokuyama Bay         710           46         Offshore of Ube         560           48         Offshore of Hagi         220           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         21           Kagawa Pref.         50         Takamatsu Port         1,400           Kochi Pref.         51         Niihama Port				
36   Mouth of Riv. Yodo (Osaka City)   1,400   37   Osaka Port   17,000   38   Outside Osaka Port   6,300   17,000   38   Outside Osaka Port   5,000				1,700
37   Osaka Port   17,000   38   Outside Osaka Port   6,300	,			1,400
Hyogo Pref.         39         Offshore of Himeji         720           Kobe City         40         Kobe Port (center)         30,000           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         84           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         460           Okayama Pref.         43         Offshore of Mizushima         200           Hiroshima Pref.         44         Kure Port         15,000           45         Hiroshima Bay         1,300           Yamaguchi Pref.         46         Tokuyama Bay         710           47         Offshore of Ube         560           48         Offshore of Hagi         220           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         21           Kagawa Pref.         50         Takamatsu Port         340           Ehime Pref.         51         Niihama Port         340           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         100           Kitakyushu City         53         Dokai Bay         17,000           Fukuoka City         54         Hakata Bay         380           Saga Pref.				17,000
Kobe City         40         Kobe Port (center)         30,000           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         84           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         460           Okayama Pref.         43         Offshore of Mizushima         200           Hiroshima Pref.         44         Kure Port         15,000           45         Hiroshima Bay         1,300           Yamaguchi Pref.         46         Tokuyama Bay         710           47         Offshore of Ube         560           48         Offshore of Hagi         220           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         21           Kagawa Pref.         50         Takamatsu Port         340           Kochi Pref.         51         Niihama Port         340           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         100           Kitakyushu City         53         Dokai Bay         17,000           Fukuoka City         54         Hakata Bay         380           Saga Pref.         55         Imari Bay         1,000           Nagasaki Pref.         <		38	Outside Osaka Port	6,300
Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         84           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         460           Okayama Pref.         43         Offshore of Mizushima         200           Hiroshima Pref.         44         Kure Port         15,000           45         Hiroshima Bay         710           Yamaguchi Pref.         46         Tokuyama Bay         710           47         Offshore of Ube         560           48         Offshore of Hagi         220           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         21           Kagawa Pref.         50         Takamatsu Port         1,400           Ehime Pref.         51         Niihama Port         340           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         100           Kitakyushu City         53         Dokai Bay         17,000           Fukuoka City         54         Hakata Bay         380           Saga Pref.         55         Imari Bay         1,000           Nagasaki Pref.         56         Omura Bay         560           Oita Pref.         57	Hyogo Pref.			720
Wakayama Pref.       42       Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)       460         Okayama Pref.       43       Offshore of Mizushima       200         Hiroshima Pref.       44       Kure Port       15,000         45       Hiroshima Bay       1,300         Yamaguchi Pref.       46       Tokuyama Bay       710         47       Offshore of Ube       560         48       Offshore of Hagi       220         Tokushima Pref.       49       Mouth of Riv. Yoshino (Tokushima City)       21         Kagawa Pref.       50       Takamatsu Port       1,400         Ehime Pref.       51       Niihama Port       340         Kochi Pref.       52       Mouth of Riv. Shimanto (Shimanto City)       100         Kitakyushu City       53       Dokai Bay       17,000         Fukuoka City       54       Hakata Bay       380         Saga Pref.       55       Imari Bay       1,000         Nagasaki Pref.       56       Omura Bay       560         Oita Pref.       57       Mouth of Riv. Oita (Oita City)       8.9         Miyazaki Pref.       58       Mouth of Riv. Oyodo (Miyazaki City)       1r(0.5)         Kagoshima Pref. <td></td> <td></td> <td></td> <td></td>				
Okayama Pref.         43         Offshore of Mizushima         200           Hiroshima Pref.         44         Kure Port         15,000           45         Hiroshima Bay         1,300           Yamaguchi Pref.         46         Tokuyama Bay         710           47         Offshore of Ube         560           48         Offshore of Hagi         220           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         21           Kagawa Pref.         50         Takamatsu Port         1,400           Ehime Pref.         51         Niihama Port         340           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         100           Kitakyushu City         53         Dokai Bay         17,000           Fukuoka City         54         Hakata Bay         380           Saga Pref.         55         Imari Bay         1,000           Nagasaki Pref.         56         Omura Bay         560           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         8.9           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         tr(0.5)           Kagoshima Pref.         59         Riv. Amori (Kiri				
Hiroshima Pref.       44       Kure Port       15,000         45       Hiroshima Bay       1,300         Yamaguchi Pref.       46       Tokuyama Bay       710         47       Offshore of Ube       560         48       Offshore of Hagi       220         Tokushima Pref.       49       Mouth of Riv. Yoshino (Tokushima City)       21         Kagawa Pref.       50       Takamatsu Port       1,400         Ehime Pref.       51       Niihama Port       340         Kochi Pref.       52       Mouth of Riv. Shimanto (Shimanto City)       100         Kitakyushu City       53       Dokai Bay       17,000         Fukuoka City       54       Hakata Bay       380         Saga Pref.       55       Imari Bay       1,000         Nagasaki Pref.       56       Omura Bay       560         Oita Pref.       57       Mouth of Riv. Oita (Oita City)       8.9         Miyazaki Pref.       58       Mouth of Riv. Oyodo (Miyazaki City)       tr(0.5)         Kagoshima Pref.       59       Riv. Amori (Kirishima City)       0.8         60       Riv. Gotanda (Ichikikushikino City)       2.9	_			
45   Hiroshima Bay   1,300     Yamaguchi Pref.   46   Tokuyama Bay   710     47   Offshore of Ube   560     48   Offshore of Hagi   220     Tokushima Pref.   49   Mouth of Riv. Yoshino (Tokushima City)   21     Kagawa Pref.   50   Takamatsu Port   1,400     Ehime Pref.   51   Niihama Port   340     Kochi Pref.   52   Mouth of Riv. Shimanto (Shimanto City)   100     Kitakyushu City   53   Dokai Bay   17,000     Fukuoka City   54   Hakata Bay   380     Saga Pref.   55   Imari Bay   1,000     Nagasaki Pref.   56   Omura Bay   560     Oita Pref.   57   Mouth of Riv. Oita (Oita City)   8.9     Miyazaki Pref.   58   Mouth of Riv. Oyodo (Miyazaki City)   10.8     Kagoshima Pref.   59   Riv. Amori (Kirishima City)   0.8     60   Riv. Gotanda (Ichikikushikino City)   2.9				
Yamaguchi Pref.       46       Tokuyama Bay       710         47       Offshore of Ube       560         48       Offshore of Hagi       220         Tokushima Pref.       49       Mouth of Riv. Yoshino (Tokushima City)       21         Kagawa Pref.       50       Takamatsu Port       1,400         Ehime Pref.       51       Niihama Port       340         Kochi Pref.       52       Mouth of Riv. Shimanto (Shimanto City)       100         Kitakyushu City       53       Dokai Bay       17,000         Fukuoka City       54       Hakata Bay       380         Saga Pref.       55       Imari Bay       1,000         Nagasaki Pref.       56       Omura Bay       560         Oita Pref.       57       Mouth of Riv. Oita (Oita City)       8.9         Miyazaki Pref.       58       Mouth of Riv. Oyodo (Miyazaki City)       tr(0.5)         Kagoshima Pref.       59       Riv. Amori (Kirishima City)       0.8         60       Riv. Gotanda (Ichikikushikino City)       2.9	Hiroshima Pref.			<u> </u>
47       Offshore of Ube       560         48       Offshore of Hagi       220         Tokushima Pref.       49       Mouth of Riv. Yoshino (Tokushima City)       21         Kagawa Pref.       50       Takamatsu Port       1,400         Ehime Pref.       51       Niihama Port       340         Kochi Pref.       52       Mouth of Riv. Shimanto (Shimanto City)       100         Kitakyushu City       53       Dokai Bay       17,000         Fukuoka City       54       Hakata Bay       380         Saga Pref.       55       Imari Bay       1,000         Nagasaki Pref.       56       Omura Bay       560         Oita Pref.       57       Mouth of Riv. Oita (Oita City)       8.9         Miyazaki Pref.       58       Mouth of Riv. Oyodo (Miyazaki City)       tr(0.5)         Kagoshima Pref.       59       Riv. Amori (Kirishima City)       0.8         60       Riv. Gotanda (Ichikikushikino City)       2.9	1' D C		·	
48         Offshore of Hagi         220           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         21           Kagawa Pref.         50         Takamatsu Port         1,400           Ehime Pref.         51         Niihama Port         340           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         100           Kitakyushu City         53         Dokai Bay         17,000           Fukuoka City         54         Hakata Bay         380           Saga Pref.         55         Imari Bay         1,000           Nagasaki Pref.         56         Omura Bay         560           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         8.9           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         tr(0.5)           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         0.8           60         Riv. Gotanda (Ichikikushikino City)         2.9	Yamaguchi Pref.			
Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         21           Kagawa Pref.         50         Takamatsu Port         1,400           Ehime Pref.         51         Niihama Port         340           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         100           Kitakyushu City         53         Dokai Bay         17,000           Fukuoka City         54         Hakata Bay         380           Saga Pref.         55         Imari Bay         1,000           Nagasaki Pref.         56         Omura Bay         560           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         8.9           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         tr(0.5)           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         0.8           60         Riv. Gotanda (Ichikikushikino City)         2.9		_		_
Kagawa Pref.       50       Takamatsu Port       1,400         Ehime Pref.       51       Niihama Port       340         Kochi Pref.       52       Mouth of Riv. Shimanto (Shimanto City)       100         Kitakyushu City       53       Dokai Bay       17,000         Fukuoka City       54       Hakata Bay       380         Saga Pref.       55       Imari Bay       1,000         Nagasaki Pref.       56       Omura Bay       560         Oita Pref.       57       Mouth of Riv. Oita (Oita City)       8.9         Miyazaki Pref.       58       Mouth of Riv. Oyodo (Miyazaki City)       tr(0.5)         Kagoshima Pref.       59       Riv. Amori (Kirishima City)       0.8         60       Riv. Gotanda (Ichikikushikino City)       2.9	Tokuchima Prof			
Ehime Pref.         51         Niihama Port         340           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         100           Kitakyushu City         53         Dokai Bay         17,000           Fukuoka City         54         Hakata Bay         380           Saga Pref.         55         Imari Bay         1,000           Nagasaki Pref.         56         Omura Bay         560           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         8.9           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         tr(0.5)           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         0.8           60         Riv. Gotanda (Ichikikushikino City)         2.9				
Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         100           Kitakyushu City         53         Dokai Bay         17,000           Fukuoka City         54         Hakata Bay         380           Saga Pref.         55         Imari Bay         1,000           Nagasaki Pref.         56         Omura Bay         560           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         8.9           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         tr(0.5)           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         0.8           60         Riv. Gotanda (Ichikikushikino City)         2.9				
Kitakyushu City         53         Dokai Bay         17,000           Fukuoka City         54         Hakata Bay         380           Saga Pref.         55         Imari Bay         1,000           Nagasaki Pref.         56         Omura Bay         560           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         8.9           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         tr(0.5)           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         0.8           60         Riv. Gotanda (Ichikikushikino City)         2.9				
Fukuoka City         54         Hakata Bay         380           Saga Pref.         55         Imari Bay         1,000           Nagasaki Pref.         56         Omura Bay         560           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         8.9           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         tr(0.5)           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         0.8           60         Riv. Gotanda (Ichikikushikino City)         2.9			` ','	_
Saga Pref.         55         Imari Bay         1,000           Nagasaki Pref.         56         Omura Bay         560           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         8.9           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         tr(0.5)           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         0.8           60         Riv. Gotanda (Ichikikushikino City)         2.9	Fukuoka City			_
Nagasaki Pref.         56         Omura Bay         560           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         8.9           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         tr(0.5)           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         0.8           60         Riv. Gotanda (Ichikikushikino City)         2.9	Saga Pref.			
Oita Pref.         57         Mouth of Riv. Oita (Oita City)         8.9           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         tr(0.5)           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         0.8           60         Riv. Gotanda (Ichikikushikino City)         2.9	Nagasaki Pref.		·	
Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         tr(0.5)           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         0.8           60         Riv. Gotanda (Ichikikushikino City)         2.9	Oita Pref.			8.9
Kagoshima Pref.         59         Riv. Amori (Kirishima City)         0.8           60         Riv. Gotanda (Ichikikushikino City)         2.9	Miyazaki Pref.			tr(0.5)
60 Riv. Gotanda (Ichikikushikino City) 2.9	Kagoshima Pref.			
Okinawa Pref. 61 Naha Port 21,000		60	Riv. Gotanda (Ichikikushikino City)	
	Okinawa Pref.	61	Naha Port	21,000

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

#### [1-7-1] 2,2',3,3',4,4',5-Heptachlorobiphenyl (#170) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 59/61 (Missing value: 0) Detection Frequency (sample): 59/61 (Missing value: 0)

	Aggregated value
Geometric mean	39
Median	40
Maximum	4,900
Minimum	nd

Local communities	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	5.9
	2	Tomakomai Port	37
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	1.4
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	41
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	2.5
Akita Pref.	6	Lake Hachiro	15
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	9.9
Fukushima Pref.	8	Onahama Port	85
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	8.1
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	1.8
Chiba Pref.	_	Coast of Ichihara and Anegasaki	170
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	4.4
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	150
Tokyo Met.		Mouth of Riv. Alakawa (Roto Ward)  Mouth of Riv. Sumida (Minato Ward)	860
Yokohama City		Yokohama Port	930
	_		
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	160
N" . D C	_	Front of Ougi Town, Keihin Canal, Port of Kawasaki	910
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	3.3
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	2.9
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	27
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	7.8
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	3.0
Nagano Pref.		Lake Suwa (center)	37
Shizuoka Pref.		Shimizu Port	130
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	3.6
Aichi Pref.	26	Kinuura Port	16
	27	Nagoya Port	36
Mie Pref.	28	Yokkaichi Port	4,900
	29	Toba Port	350
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	48
	31	Lake Biwa (center, offshore of Karasaki)	76
Kyoto Pref.	32	Miyazu Port	18
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	22
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	440
Osaka City	_	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	250
Ž		Mouth of Riv. Yodo (Osaka City)	210
		Osaka Port	2,100
		Outside Osaka Port	670
Hyogo Pref.	39	Offshore of Himeji	82
Kobe City		Kobe Port (center)	2,900
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	14
Wakayama Pref.	_	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	56
Okayama Pref.		Offshore of Mizushima	17
Hiroshima Pref.		Kure Port	1,500
Timosimila Tier.		Hiroshima Bay	110
Yamaguchi Pref.		Tokuyama Bay	60
Tamaguem Tier.		Offshore of Ube	57
		Offshore of Hagi	22
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	2.3
Kagawa Pref.		Takamatsu Port	190
Ehime Pref.	_	Niihama Port	24
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	11
Kitakyushu City	53	Dokai Bay	1,800
	_		
Fukuoka City		Hakata Bay	40
Saga Pref.	_	Imari Bay	100
Nagasaki Pref.		Omura Bay	56
Oita Pref.		Mouth of Riv. Oita (Oita City)	1.1
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
		Riv. Gotanda (Ichikikushikino City)	tr(0.5)
Okinawa Pref.	61	Naha Port	2,300

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [1-7-2] 2,2',3,4,4',5,5'-Heptachlorobiphenyl (#180) /sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 61/61 \; (Missing \; value: 0) \\ \text{Detection Frequency (sample)}: 61/61 \; (Missing \; value: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	90
Median	97
Maximum	14,000
Minimum	tr(0.5)

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	12
Tronnardo	2	Tomakomai Port	110
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	2.4
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	120
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	6.5
Akita Pref.	6	Lake Hachiro	26
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	17
Fukushima Pref.	8	Onahama Port	200
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	15
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	3.6
Chiba Pref.	11	Coast of Ichihara and Anegasaki	400
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	8.9
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	260
	14	Mouth of Riv. Sumida (Minato Ward)	1,900
Yokohama City		Yokohama Port	2,500
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	260
		Front of Ougi Town, Keihin Canal, Port of Kawasaki	2,200
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	7.0
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	5.1
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	59
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	18
Yamanashi Pref.			5.0
Nagano Pref.		Lake Suwa (center)	79
Shizuoka Pref.		Shimizu Port	360
	25		8.3
Aichi Pref.		Kinuura Port	41
16: D. C		Nagoya Port	72
Mie Pref.	_	Yokkaichi Port	14,000
CI: D C		Toba Port	1,100
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	90
Vt- Df		Lake Biwa (center, offshore of Karasaki)	110 37
Kyoto Pref. Kyoto City		Miyazu Port Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	36
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	1,100
Osaka Fier. Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	470
Osaka City		Mouth of Riv. Yodo (Osaka City)	370
		Osaka Port	5,000
		Outside Osaka Port	1,800
Hyogo Pref.		Offshore of Himeji	170
Kobe City		Kobe Port (center)	8,600
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	29
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	130
Okayama Pref.		Offshore of Mizushima	44
Hiroshima Pref.	44	Kure Port	4,400
		Hiroshima Bay	290
Yamaguchi Pref.		Tokuyama Bay	170
	47	Offshore of Ube	140
	48	Offshore of Hagi	58
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	5.4
Kagawa Pref.	50	Takamatsu Port	400
Ehime Pref.	51	Niihama Port	68
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	30
Kitakyushu City	53	Dokai Bay	5,000
Fukuoka City	54	Hakata Bay	97
Saga Pref.		Imari Bay	280
Nagasaki Pref.		Omura Bay	140
Oita Pref.		Mouth of Riv. Oita (Oita City)	2.7
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	tr(0.5)
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	tr(0.5)
		Riv. Gotanda (Ichikikushikino City)	1.0
Okinawa Pref.	61	Naha Port	6,500

Okinawa Pref. 61 Naha Port 6, (Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

#### [1-7-3] 2,3,3',4,4',5,5'-Heptachlorobiphenyl (#189) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 50/61 (Missing value : 0) Detection Frequency (sample) : 50/61 (Missing value : 0)

	Aggregated value
Geometric mean	2.5
Median	2.4
Maximum	160
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.3)
Hokkaido	2	Tomakomai Port	1.4
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	2.4
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	1.2
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	0.8
Fukushima Pref.	8	Onahama Port	4.7
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	0.7
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	6.8
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(0.3)
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	9.3
	14	Mouth of Riv. Sumida (Minato Ward)	41
Yokohama City	15	Yokohama Port	41
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	11
	17	Front of Ougi Town, Keihin Canal, Port of Kawasaki	45
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(0.3)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1.6
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.6)
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	2.5
Shizuoka Pref.		Shimizu Port	5.4
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	0.7
		Nagoya Port	2.2
Mie Pref.		Yokkaichi Port	160
ali D a		Toba Port	12
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	4.8
II D C		Lake Biwa (center, offshore of Karasaki)	6.4
Kyoto Pref.		Miyazu Port	1.2
Kyoto City Osaka Pref.		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1.2
		Mouth of Riv. Yamato (Sakai City) Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	15
Osaka City		Mouth of Riv. Yodo (Osaka City)	12
		Osaka Port	93
		Outside Osaka Port	32
Hyogo Pref.		Offshore of Himeji	6.2
Kobe City		Kobe Port (center)	110
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(0.6)
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	3.1
Okayama Pref.		Offshore of Mizushima	1.0
Hiroshima Pref.		Kure Port	62
	45	Hiroshima Bay	5.6
Yamaguchi Pref.		Tokuyama Bay	2.9
	47	Offshore of Ube	2.4
	48	Offshore of Hagi	1.0
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	10
Ehime Pref.	51	Niihama Port	1.8
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(0.4)
Kitakyushu City	53	Dokai Bay	65
Fukuoka City		Hakata Bay	2.2
Saga Pref.		Imari Bay	4.7
Nagasaki Pref.		Omura Bay	3.0
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	79

Okinawa Pref. 61 Naha Port (Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [1-8] Octachlorobiphenyls/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 59/61 (Missing value: 0) Detection Frequency (sample): 59/61 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.6

	Aggregated value
Geometric mean	57
Median	80
Maximum	13,000
Minimum	nd

Local communities	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	6.2
	2	Tomakomai Port	80
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(0.5)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	99
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	3.0
Akita Pref.	6	Lake Hachiro	16
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	7.5
Fukushima Pref.	8	Onahama Port	140
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	11
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	1.8
Chiba Pref.		Coast of Ichihara and Anegasaki	280
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	4.1
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	190
Tokyo Met.		Mouth of Riv. Alakawa (Roto Ward)  Mouth of Riv. Sumida (Minato Ward)	1,100
Yokohama City	_	Yokohama Port	1,600
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	100
Kawasaki City			1,400
N" , D C	_	Front of Ougi Town, Keihin Canal, Port of Kawasaki	
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	3.6
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1.9
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	40
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	18
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	1.8
Nagano Pref.	_	Lake Suwa (center)	50
Shizuoka Pref.		Shimizu Port	280
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	5.5
Aichi Pref.		Kinuura Port	32
	27	Nagoya Port	60
Mie Pref.	28	Yokkaichi Port	13,000
	29	Toba Port	870
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	89
	31	Lake Biwa (center, offshore of Karasaki)	75
Kyoto Pref.		Miyazu Port	43
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	11
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	960
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	260
-	36	Mouth of Riv. Yodo (Osaka City)	200
	37	Osaka Port	3,200
	38	Outside Osaka Port	1,200
Hyogo Pref.	39	Offshore of Himeji	130
Kobe City	40	Kobe Port (center)	7,800
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	14
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	81
Okayama Pref.		Offshore of Mizushima	44
Hiroshima Pref.	44	Kure Port	3,400
	45	Hiroshima Bay	280
Yamaguchi Pref.		Tokuyama Bay	170
		Offshore of Ube	110
		Offshore of Hagi	59
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	2.5
Kagawa Pref.	_	Takamatsu Port	260
Ehime Pref.	51	Niihama Port	89
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	21
Kitakyushu City	53	Dokai Bay	4,400
Fukuoka City	_	Hakata Bay	80
		Imari Bay	210
Saga Pref. Nagasaki Pref.		Omura Bay	140
			1.4
Oita Pref.		Mouth of Riv. Oita (Oita City)	
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
011	60	Riv. Gotanda (Ichikikushikino City)	tr(0.2)
Okinawa Pref.	61	Naha Port	4,300

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

(Note 4) nd : Not detected

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

#### [1-9] Nonachlorobiphenyls/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 51/61 (Missing value : 0) Detection Frequency (sample) : 51/61 (Missing value : 0)

	Aggregated value
Geometric mean	8.3
Median	14
Maximum	900
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.8)
	2	Tomakomai Port	5.6
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	15
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	5.0
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	2.7
Fukushima Pref.	8	Onahama Port	27
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	4.8
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	28
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	tr(0.4)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	30
Tokyo Wict.		Mouth of Riv. Sumida (Minato Ward)	170
Yokohama City		Yokohama Port	180
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	15
Kawasaki City		Front of Ougi Town, Keihin Canal, Port of Kawasaki	200
Niit- Df			
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(0.7)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	7.2
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	2.3
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	14
Shizuoka Pref.		Shimizu Port	23
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(0.5)
Aichi Pref.		Kinuura Port	3.1
		Nagoya Port	8.0
Mie Pref.		Yokkaichi Port	900
		Toba Port	58
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	24
	31	Lake Biwa (center, offshore of Karasaki)	17
Kyoto Pref.		Miyazu Port	5.8
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(0.9)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	79
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	33
	36	Mouth of Riv. Yodo (Osaka City)	33
		Osaka Port	390
	38	Outside Osaka Port	120
Hyogo Pref.	39	Offshore of Himeji	23
Kobe City	40	Kobe Port (center)	490
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(0.7)
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	17
Okayama Pref.	43	Offshore of Mizushima	5.4
Hiroshima Pref.	44	Kure Port	380
	45	Hiroshima Bay	28
Yamaguchi Pref.		Tokuyama Bay	15
Ü	47	Offshore of Ube	10
	48	Offshore of Hagi	5.6
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	33
Ehime Pref.		Niihama Port	42
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	2.0
Kitakyushu City			380
Fukuoka City		Hakata Bay	11
Saga Pref.		Imari Bay	18
Nagasaki Pref.	_	Omura Bay	35
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
		Riv. Amori (Kirishima City)	nd
Kagoshima Pref.		Riv. Gotanda (Ichikikushikino City)	
Ol-in P. C			nd 400
Okinawa Pref.	61	Naha Port	400

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [1-10] Decachlorobiphenyl/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 53/61 (Missing value: 0) Detection Frequency (sample): 53/61 (Missing value: 0)

	Aggregated value
Geometric mean	7.9
Median	8.1
Maximum	1,600
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.8
	2	Tomakomai Port	2.6
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	31
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	8.0
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	4.1
Fukushima Pref.	8	Onahama Port	530
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	6.8
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	_	Coast of Ichihara and Anegasaki	26
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	
	_	` ''	tr(0.6)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	
77 1 1 C':	_	Mouth of Riv. Sumida (Minato Ward)	260
Yokohama City	_	Yokohama Port	500
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	12
	_	Front of Ougi Town, Keihin Canal, Port of Kawasaki	470
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	1.2
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	6.7
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.5)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(0.6)
Nagano Pref.	23	Lake Suwa (center)	10
Shizuoka Pref.	24	Shimizu Port	20
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	1.3
Aichi Pref.	26	Kinuura Port	tr(1.0)
	27	Nagoya Port	4.6
Mie Pref.	28	Yokkaichi Port	350
	29	Toba Port	5.5
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	21
8		Lake Biwa (center, offshore of Karasaki)	12
Kyoto Pref.	_	Miyazu Port	5.1
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(0.6)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	45
Osaka City	_	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	20
Osuku City		Mouth of Riv. Yodo (Osaka City)	22
		Osaka Port	190
		Outside Osaka Port	49
Hyogo Pref.	39	Offshore of Himeji	33
Kobe City		Kobe Port (center)	51
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(0.5)
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	
Okayama Pref.		Offshore of Mizushima	3.8
Hiroshima Pref.		Kure Port	570
1'D C		Hiroshima Bay	16
Yamaguchi Pref.		Tokuyama Bay	9.1
		Offshore of Ube	10
m.i. 11. D.C		Offshore of Hagi	2.1
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(0.5)
Kagawa Pref.	_	Takamatsu Port	24
Ehime Pref.	_	Niihama Port	340
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	1.2
Kitakyushu City	_	,	1,600
Fukuoka City		Hakata Bay	7.2
Saga Pref.	_	Imari Bay	8.1
Nagasaki Pref.		Omura Bay	49
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		Naha Port	130
(Note 1) Detection for		(oits) is based on the number of sites, thus means (the number of detected sites/the number	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [2] HCB (Hexachlorobenzene) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 61/61 (Missing value : 0) Detection Frequency (sample) : 61/61 (Missing value : 0)

	Aggregated value
Geometric mean	42
Median	36
Maximum	4,800
Minimum	1.6

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	86
	2	Tomakomai Port	43
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	16
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	360
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	11
Akita Pref.	6	Lake Hachiro	32
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	41
Fukushima Pref.	8	Onahama Port	3,800
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	120
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	7.3
Chiba Pref.		Coast of Ichihara and Anegasaki	100
Chiba City		Mouth of Riv. Hanami (Chiba City)	5.8
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	470
, , , , , , , , , , , , , , , , , , , ,		Mouth of Riv. Sumida (Minato Ward)	340
Yokohama City		Yokohama Port	190
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	83
Tan wasani City		Front of Ougi Town, Keihin Canal, Port of Kawasaki	480
Niigata Pref.		Lower Riv. Shinano (Niigata City)	50
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	19
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	880
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	20
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	18
Nagano Pref.		Lake Suwa (center)	170
Shizuoka Pref.		Shimizu Port	42
Silizuoka 11ci.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	19
Aichi Pref.		Kinuura Port	3.1
mem rier.		Nagoya Port	12
Mie Pref.		Yokkaichi Port	96
which fel.	29	Toba Port	45
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	81
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	27
Kyoto Pref.		Miyazu Port	7.5
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	16
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	120
Osaka Fiel.		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	78
Osaka City		Mouth of Riv. Yodo (Osaka City)	88
		Osaka Port	540
		Outside Osaka Port	63
Hvogo Pref.		Offshore of Himeji	36
Kobe City		Kobe Port (center)	36
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	3.3
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	110
Okayama Pref.	43	Offshore of Mizushima	16
Hiroshima Pref.	_	Kure Port	32
mirosiiiiia Piei.		Hiroshima Bay	11
Yamaguchi Pref.		Tokuyama Bay	68
i amagucini Piei.		Offshore of Ube	
			29 6.7
Tokushima Pref.		Offshore of Hagi	
		Mouth of Riv. Yoshino (Tokushima City)	14
Kagawa Pref.		Takamatsu Port	56
Ehime Pref. Kochi Pref.		Niihama Port	560
		Mouth of Riv. Shimanto (Shimanto City)	27
Kitakyushu City		Dokai Bay	4,800
Fukuoka City		Hakata Bay	17
Saga Pref.		Imari Bay	42
Nagasaki Pref.		Omura Bay	19
Oita Pref.		Mouth of Riv. Oita (Oita City)	4.3
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	4.5
Kagoshima Pref.		Riv. Amori (Kirishima City)	2.8
		Riv. Gotanda (Ichikikushikino City)	1.6
Okinawa Pref.	61	Naha Port (site) is based on the number of sites, thus means (the number of detected sites/the number)	22

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

# [11-1] $\alpha$ -HCH /sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \mbox{Detection Frequency (site)}: 61/61 \; (\mbox{Missing value}: 0) \\ \mbox{Detection Frequency (sample)}: 61/61 \; (\mbox{Missing value}: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	67
Median	80
Maximum	2,800
Minimum	1.2

Local communities	_	Monitored sites	Aggregated value
Hokkaido		Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	930
	2	Tomakomai Port	33
Iwate Pref.		Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	39
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	54
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	1.2
Akita Pref.		Lake Hachiro	110
Yamagata Pref.		Mouth of Riv. Mogami (Sakata City)	30
Fukushima Pref.	8	Onahama Port	460
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	21
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	1.8
Chiba Pref.	_	Coast of Ichihara and Anegasaki	70
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	3.5
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	180
** 1 1 0"	_	Mouth of Riv. Sumida (Minato Ward)	560
Yokohama City		Yokohama Port	170
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	89
		Front of Ougi Town, Keihin Canal, Port of Kawasaki	190
Niigata Pref.		Lower Riv. Shinano (Niigata City)	23
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	23
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	70
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	33
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	3.3
Nagano Pref.	_	Lake Suwa (center)	140
Shizuoka Pref.		Shimizu Port	64
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	12
Aichi Pref.		Kinuura Port	39
	_	Nagoya Port	78
Mie Pref.		Yokkaichi Port	160
~		Toba Port	41
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	230
		Lake Biwa (center, offshore of Karasaki)	100
Kyoto Pref.		Miyazu Port	67
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	32
Osaka Pref.	_	Mouth of Riv. Yamato (Sakai City)	150
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	200
		Mouth of Riv. Yodo (Osaka City)	270
		Osaka Port	1,400
		Outside Osaka Port	1,200
Hyogo Pref.		Offshore of Himeji	130
Kobe City	_	Kobe Port (center)	480
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	1.9
Wakayama Pref.	_	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	90
Okayama Pref.		Offshore of Mizushima	22
Hiroshima Pref.		Kure Port	530
** 115 0	_	Hiroshima Bay	190
Yamaguchi Pref.		Tokuyama Bay	80
		Offshore of Ube	190
m 1 1 2 - 2	_	Offshore of Hagi	25
Tokushima Pref.	_	Mouth of Riv. Yoshino (Tokushima City)	18
Kagawa Pref.		Takamatsu Port	250
Ehime Pref.		Niihama Port	56
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	63
Kitakyushu City		Dokai Bay	2,800
Fukuoka City	_	Hakata Bay	200
Saga Pref.		Imari Bay	320
Nagasaki Pref.		Omura Bay	220
Oita Pref.		Mouth of Riv. Oita (Oita City)	1.9
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	86
Kagoshima Pref.		Riv. Amori (Kirishima City)	2.7
		Riv. Gotanda (Ichikikushikino City)	6.2
Okinawa Pref.	61	Naha Port	110

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

# [11-2] $\beta$ -HCH /sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 61/61 \; (Missing \; value: 0) \\ \text{Detection Frequency (sample)}: 61/61 \; (Missing \; value: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	120
Median	100
Maximum	2,900
Minimum	2.2

Local communities		Monitored sites	Aggregated value
Hokkaido		Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	970
	2	Tomakomai Port	44
Iwate Pref.		Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	19
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	92
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	2.2
Akita Pref.		Lake Hachiro	520
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	77
Fukushima Pref.	8	Onahama Port	380
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	39
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	5.5
Chiba Pref.	11	Coast of Ichihara and Anegasaki	68
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	11
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	260
	14	Mouth of Riv. Sumida (Minato Ward)	550
Yokohama City		Yokohama Port	160
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	75
	17	Front of Ougi Town, Keihin Canal, Port of Kawasaki	180
Niigata Pref.		Lower Riv. Shinano (Niigata City)	53
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	55
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	120
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	100
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	9.8
Nagano Pref.	23	Lake Suwa (center)	280
Shizuoka Pref.	24	Shimizu Port	94
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	15
Aichi Pref.	26	Kinuura Port	34
	27	Nagoya Port	70
Mie Pref.	28	Yokkaichi Port	160
	29	Toba Port	81
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	2,100
_	31	Lake Biwa (center, offshore of Karasaki)	410
Kyoto Pref.	32	Miyazu Port	97
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	85
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	610
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	1,600
•	36	Mouth of Riv. Yodo (Osaka City)	1,500
	37	Osaka Port	2,000
	38	Outside Osaka Port	810
Hyogo Pref.	39	Offshore of Himeji	270
Kobe City		Kobe Port (center)	560
Nara Pref.	_	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	8.2
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	140
Okayama Pref.	43	Offshore of Mizushima	38
Hiroshima Pref.	44	Kure Port	540
	45	Hiroshima Bay	180
Yamaguchi Pref.	_	Tokuyama Bay	77
C		Offshore of Ube	270
		Offshore of Hagi	31
Tokushima Pref.	_	Mouth of Riv. Yoshino (Tokushima City)	33
Kagawa Pref.		Takamatsu Port	430
Ehime Pref.		Niihama Port	73
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	100
Kitakyushu City		Dokai Bay	2,900
Fukuoka City		Hakata Bay	200
Saga Pref.	_	Imari Bay	510
Nagasaki Pref.	_	Omura Bay	320
Oita Pref.		Mouth of Riv. Oita (Oita City)	4.0
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	200
Kagoshima Pref.	_	Riv. Amori (Kirishima City)	9.1
ragosillila FICI.		Riv. Gotanda (Ichikikushikino City)	31
Okinawa Pref.		Naha Port	91
Okillawa Piel.		[Nama Port	71

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

#### [11-3] γ-HCH (synonym: Lindane) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 61/61 (Missing value : 0)
Detection Frequency (sample) : 61/61 (Missing value : 0)

	Aggregated value
Geometric mean	23
Median	29
Maximum	2,100
Minimum	tr(0.7)

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	220
	2	Tomakomai Port	9.5
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	11
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	15
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(0.7)
Akita Pref.	6	Lake Hachiro	35
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	9.5
Fukushima Pref.	8	Onahama Port	140
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	5.5
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.9)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	32
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	1.3
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	69
,	14	Mouth of Riv. Sumida (Minato Ward)	420
Yokohama City	15	Yokohama Port	82
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	32
	17	Front of Ougi Town, Keihin Canal, Port of Kawasaki	79
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	6.7
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	4.9
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	17
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	11
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	1.4
Nagano Pref.	23	Lake Suwa (center)	48
Shizuoka Pref.	24	Shimizu Port	18
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	4.1
Aichi Pref.	26	Kinuura Port	10
		Nagoya Port	22
Mie Pref.	28	Yokkaichi Port	50
	29	Toba Port	120
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	68
	31	Lake Biwa (center, offshore of Karasaki)	26
Kyoto Pref.	_	Miyazu Port	18
Kyoto City	_	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	13
Osaka Pref.	_	Mouth of Riv. Yamato (Sakai City)	83
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	58
	36	Mouth of Riv. Yodo (Osaka City)	72
	37	Osaka Port	470
		Outside Osaka Port	260
Hyogo Pref.		Offshore of Himeji	56
Kobe City	_	Kobe Port (center)	120
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(0.8)
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	29
Okayama Pref.	43	Offshore of Mizushima	4.8
Hiroshima Pref.		Kure Port	200
**		Hiroshima Bay	43
Yamaguchi Pref.		Tokuyama Bay	19
		Offshore of Ube	31
	48	Offshore of Hagi	6.2
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	5.0
Kagawa Pref.	50	Takamatsu Port	53
Ehime Pref.	51	Niihama Port	14
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	15
Kitakyushu City	53	Dokai Bay	2,100
Fukuoka City			37
Saga Pref.		Imari Bay	69
Nagasaki Pref.		Omura Bay	47
Oita Pref.		Mouth of Riv. Oita (Oita City)	tr(0.8)
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	34
Kagoshima Pref.		Riv. Amori (Kirishima City)	1.3
		Riv. Gotanda (Ichikikushikino City)	5.4
Okinawa Pref.	61	Naha Port	61

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

# [11-4] $\delta$ -HCH /sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 61/61 \; (Missing \; value: 0) \\ \text{Detection Frequency (sample)}: 61/61 \; (Missing \; value: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	21
Median	24
Maximum	2,300
Minimum	tr(0.6)

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	230
Hokkuldo	2	Tomakomai Port	7.5
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	9.9
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	15
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(0.6)
Akita Pref.	6	Lake Hachiro	85
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	17
Fukushima Pref.	8	Onahama Port	170
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	10
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.6)
Chiba Pref.	_	Coast of Ichihara and Anegasaki	18
Chiba City		Mouth of Riv. Hanami (Chiba City)	1.4
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	86
TOKYO WIEL.		Mouth of Riv. Sumida (Minato Ward)	170
Yokohama City	15	Yokohama Port	40
	_		
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	28
NT' · D C		Front of Ougi Town, Keihin Canal, Port of Kawasaki	40
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	11
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	6.2
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	23
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	8.1
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	1.4
Nagano Pref.		Lake Suwa (center)	48
Shizuoka Pref.		Shimizu Port	12
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	2.7
Aichi Pref.		Kinuura Port	16
		Nagoya Port	24
Mie Pref.	28	Yokkaichi Port	54
	29	Toba Port	8.0
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	92
	31	Lake Biwa (center, offshore of Karasaki)	29
Kyoto Pref.	32	Miyazu Port	11
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	14
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	91
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	68
•	36	Mouth of Riv. Yodo (Osaka City)	97
	37	Osaka Port	350
	38	Outside Osaka Port	270
Hyogo Pref.	39	Offshore of Himeji	69
Kobe City	40	Kobe Port (center)	110
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	0.9
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	40
Okayama Pref.	43	Offshore of Mizushima	5.5
Hiroshima Pref.		Kure Port	110
		Hiroshima Bay	32
Yamaguchi Pref.		Tokuyama Bay	16
		Offshore of Ube	53
	48	Offshore of Hagi	4.1
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	5.1
Kagawa Pref.	50	Takamatsu Port	100
Ehime Pref.	51	Niihama Port	8.1
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	25
Kitakyushu City	53	Dokai Bay	2,300
Fukuoka City	_		53
Saga Pref.	_	Imari Bav	110
Nagasaki Pref.		Omura Bay	46
Oita Pref.	_	Mouth of Riv. Oita (Oita City)	0.7
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	24
Kagoshima Pref.		Riv. Amori (Kirishima City)	2.5
Kagosiiiila Piei.			
Olrinor Dr. C		Riv. Gotanda (Ichikikushikino City)	4.1
Okinawa Pref.	61	Naha Port	21

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

#### [14] Polybromodiphenyl ethers $(Br_4 \sim Br_{10})$ /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 59/61 (Missing value: 0)
Detection Frequency (sample): 59/61 (Missing value: 0)

	Aggregated value
Geometric mean	3,700
Median	4,700
Maximum	460,000
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1,200
	2	Tomakomai Port	3,200
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(40)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	5,600
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	110
Akita Pref.	6	Lake Hachiro	910
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	3,600
Fukushima Pref.	8	Onahama Port	17,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	22,000
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	520
Chiba Pref.	11	Coast of Ichihara and Anegasaki	18,000
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	1,400
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	68,000
	14	Mouth of Riv. Sumida (Minato Ward)	81,000
Yokohama City	15	Yokohama Port	17,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	9,800
	17	Front of Ougi Town, Keihin Canal, Port of Kawasaki	25,000
Niigata Pref.		Lower Riv. Shinano (Niigata City)	1,800
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	200
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	89,000
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	230
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	6,800
Nagano Pref.	23	Lake Suwa (center)	7,400
Shizuoka Pref.	24	Shimizu Port	2,200
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	840
Aichi Pref.		Kinuura Port	1,000
	27	Nagoya Port	77,000
Mie Pref.		Yokkaichi Port	46,000
		Toba Port	2,200
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	4,500
	31	Lake Biwa (center, offshore of Karasaki)	5,000
Kyoto Pref.		Miyazu Port	1,100
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	520
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	45,000
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	50,000
		Mouth of Riv. Yodo (Osaka City)	55,000
		Osaka Port	200,000
		Outside Osaka Port	19,000
Hyogo Pref.		Offshore of Himeji	6,000
Kobe City		Kobe Port (center)	15,000
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	230
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	31,000
Okayama Pref.		Offshore of Mizushima	1,400
Hiroshima Pref.		Kure Port	7,900
		Hiroshima Bay	15,000
Yamaguchi Pref.		Tokuyama Bay	460,000
	47	Offshore of Ube	9,000
		Offshore of Hagi	290
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	71
Kagawa Pref.			46,000
Ehime Pref.	51	Niihama Port	1,600
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	1,100
Kitakyushu City	53	Dokai Bay	70,000
Fukuoka City	54	Hakata Bay	4,700
Saga Pref.		Imari Bay	3,800
Nagasaki Pref.		Omura Bay	860
Oita Pref.		Mouth of Riv. Oita (Oita City)	140
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	62
011 - 2		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	51,000

Okinawa Pref. 61 Naha Port 51 (Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) \*: Indicates the sum value of the Quantification [Detection] limits of each congeners.

#### [14-1] Tetrabromodiphenyl ethers /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 52/61 (Missing value : 0) Detection Frequency (sample) : 52/61 (Missing value : 0)

	Aggregated value
Geometric mean	6.9
Median	6.4
Maximum	1,800
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	10
	2	Tomakomai Port	600
Iwate Pref.		Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	3.4
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	2.7
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	3.9
Fukushima Pref.	8	Onahama Port	150
Ibaraki Pref.		Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	13
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	11
Chiba Pref.		Coast of Ichihara and Anegasaki	19
Chiba City		Mouth of Riv. Hanami (Chiba City)	4.4
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	68
TORYO WICE.		Mouth of Riv. Sumida (Minato Ward)	83
Yokohama City	_	Yokohama Port	28
			37
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	
NT'' / D C		Front of Ougi Town, Keihin Canal, Port of Kawasaki	230
Niigata Pref.		Lower Riv. Shinano (Niigata City)	4.0
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(1.5)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	6.4
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	2.5
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	6.6
Nagano Pref.		Lake Suwa (center)	13
Shizuoka Pref.		Shimizu Port	3.9
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	4.8
Aichi Pref.		Kinuura Port	nd
	_	Nagoya Port	3.4
Mie Pref.		Yokkaichi Port	10
	_	Toba Port	3.5
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	50
	_	Lake Biwa (center, offshore of Karasaki)	24
Kyoto Pref.	_	Miyazu Port	tr(1.1)
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(1.8)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	120
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	48
		Mouth of Riv. Yodo (Osaka City)	1,800
		Osaka Port	49
		Outside Osaka Port	9.9
Hyogo Pref.		Offshore of Himeji	5.7
Kobe City	40	Kobe Port (center)	10
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	2.9
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	9.5
Okayama Pref.		Offshore of Mizushima	tr(1.3)
Hiroshima Pref.		Kure Port	6.6
	45	Hiroshima Bay	tr(1.6)
Yamaguchi Pref.		Tokuyama Bay	15
	47	Offshore of Ube	5.6
	48	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	19
Ehime Pref.		Niihama Port	2.5
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	97
Fukuoka City		Hakata Bay	6.9
Saga Pref.		Imari Bay	8.2
Nagasaki Pref.		Omura Bay	tr(1.4)
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	_	Riv. Amori (Kirishima City)	nd
		Riv. Gotanda (Ichikikushikino City)	tr(1.0)
Okinawa Pref.		Naha Port	17
(Note 1) Detection for	0.1	(site) is bessed on the number of sites, thus means (the number of detected sites/the number of	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [14-1-1] 2,2',4,4'-Tetrabromodiphenyl ether (#47) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 52/61 (Missing value : 0) Detection Frequency (sample) : 52/61 (Missing value : 0)

	Aggregated value
Geometric mean	5.3
Median	4.5
Maximum	1,400
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	8.0
	2	Tomakomai Port	350
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	3.4
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	2.7
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	3.9
Fukushima Pref.	8	Onahama Port	92
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	9.9
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	11
Chiba Pref.	_	Coast of Ichihara and Anegasaki	12
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	4.4
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	36
	_	Mouth of Riv. Sumida (Minato Ward)	45
Yokohama City	_	Yokohama Port	17
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	24
	_	Front of Ougi Town, Keihin Canal, Port of Kawasaki	130
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	3.0
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(1.5)
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	4.5
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	2.5
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	5.6
Nagano Pref.		Lake Suwa (center)	7.0
Shizuoka Pref.	_	Shimizu Port	3.9
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	3.8
Aichi Pref.	_	Kinuura Port	nd
ruem rier.		Nagoya Port	3.4
Mie Pref.		Yokkaichi Port	7.9
when then.		Toba Port	2.5
Cl.: D£	_		21
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	
77 . 70 .0	_	Lake Biwa (center, offshore of Karasaki)	14
Kyoto Pref.		Miyazu Port	tr(1.1)
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(1.8)
Osaka Pref.	_	Mouth of Riv. Yamato (Sakai City)	67
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	27
		Mouth of Riv. Yodo (Osaka City)	1,400
		Osaka Port	29
	38	Outside Osaka Port	6.2
Hyogo Pref.	39	Offshore of Himeji	4.1
Kobe City	40	Kobe Port (center)	6.1
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	2.9
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	6.9
Okayama Pref.		Offshore of Mizushima	tr(1.3)
Hiroshima Pref.		Kure Port	5.2
		Hiroshima Bay	tr(1.6)
Yamaguchi Pref.		Tokuyama Bay	9.3
r amagacini r rer.		Offshore of Ube	tr(2.1)
		Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	11
Ehime Pref.	_		
	51	Niihama Port Mouth of Riv. Shimonto (Shimonto City)	2.5
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	50
Fukuoka City		Hakata Bay	5.2
Saga Pref.	_	Imari Bay	5.5
Nagasaki Pref.		Omura Bay	tr(1.4)
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	tr(1.0)
Okinawa Pref.		Naha Port	11
(Note 1) Detection for	-	(its) is based on the number of sites, thus means (the number of detected sites/the number	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [14-2] Pentabromodiphenyl ethers /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 45/61 (Missing value: 0)
Detection Frequency (sample): 45/61 (Missing value: 0)

	Aggregated value
Geometric mean	5
Median	5
Maximum	850
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	5
	2	Tomakomai Port	850
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	5
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	tr(1)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	5
Fukushima Pref.	8	Onahama Port	160
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	13
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	18
Chiba Pref.		Coast of Ichihara and Anegasaki	19
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	9
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	68
Tokyo Wiet.		Mouth of Riv. Sumida (Minato Ward)	88
Yokohama City	_	Yokohama Port	30
	_		43
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	
N" , D C	_	Front of Ougi Town, Keihin Canal, Port of Kawasaki	310
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	tr(2)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	8
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(2)
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	4
Nagano Pref.	_	Lake Suwa (center)	6
Shizuoka Pref.		Shimizu Port	4
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(3)
Aichi Pref.		Kinuura Port	nd
	_	Nagoya Port	5
Mie Pref.	28	Yokkaichi Port	15
	29	Toba Port	tr(2)
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	42
	31	Lake Biwa (center, offshore of Karasaki)	13
Kyoto Pref.		Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(1)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	130
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	54
-	36	Mouth of Riv. Yodo (Osaka City)	420
	37	Osaka Port	40
	38	Outside Osaka Port	7
Hyogo Pref.	39	Offshore of Himeji	8
Kobe City	40	Kobe Port (center)	5
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(2)
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	8
Okayama Pref.	_	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	5
		Hiroshima Bay	nd
Yamaguchi Pref.		Tokuyama Bay	11
		Offshore of Ube	7
		Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	_	Takamatsu Port	25
Ehime Pref.	_	Niihama Port	tr(2)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	_	•	67
Fukuoka City	_	Hakata Bay	tr(2)
Saga Pref.		Imari Bay	nd
Nagasaki Pref.	_	Omura Bay	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
011 - 0		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	22

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [14-2-1] 2,2',4,4',5-Pentabromodiphenyl ether (#99) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 44/61 (Missing value: 0) Detection Frequency (sample): 44/61 (Missing value: 0)

	Aggregated value
Geometric mean	4
Median	4
Maximum	490
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	4
Tronnardo	2	Tomakomai Port	490
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(3)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(3)
Fukushima Pref.	8	Onahama Port	100
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	7
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	14
Chiba Pref.	11	Coast of Ichihara and Anegasaki	12
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	6
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	31
	14	Mouth of Riv. Sumida (Minato Ward)	45
Yokohama City		Yokohama Port	18
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	25
		Front of Ougi Town, Keihin Canal, Port of Kawasaki	180
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(2)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(3)
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(2)
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	4
Nagano Pref.		Lake Suwa (center)	4
Shizuoka Pref.		Shimizu Port	tr(2)
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(3)
Aichi Pref.		Kinuura Port	nd
		Nagoya Port	4
Mie Pref.		Yokkaichi Port	9
		Toba Port	tr(2)
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	20
** ** **		Lake Biwa (center, offshore of Karasaki)	9
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(1)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	59 30
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	280
		Mouth of Riv. Yodo (Osaka City) Osaka Port	23
		Outside Osaka Port	5
Hyogo Pref.		Offshore of Himeji	5
Kobe City		Kobe Port (center)	4
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(2)
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	6
Okayama Pref.		Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	5
		Hiroshima Bay	nd
Yamaguchi Pref.		Tokuyama Bay	5
Tumagaem Tren	47	Offshore of Ube	tr(2)
	_	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	17
Ehime Pref.	51	Niihama Port	tr(2)
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	34
Fukuoka City	54	Hakata Bay	tr(2)
Saga Pref.		Imari Bay	nd
Nagasaki Pref.		Omura Bay	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	14

Okinawa Pref. 61 Naha Port (Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [14-3] Hexabromodiphenyl ethers /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 46/61 (Missing value: 0)
Detection Frequency (sample): 46/61 (Missing value: 0)

	Aggregated value
Geometric mean	10
Median	14
Maximum	420
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	4
	2	Tomakomai Port	240
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	23
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	6
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	5
Fukushima Pref.	8	Onahama Port	140
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	18
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	4
Chiba Pref.		Coast of Ichihara and Anegasaki	44
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	5
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	140
Tokyo Met.		Mouth of Riv. Sumida (Minato Ward)	230
Yokohama City		Yokohama Port	55
	_		25
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	160
N" , D C		Front of Ougi Town, Keihin Canal, Port of Kawasaki	
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	26
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	3
Nagano Pref.	_	Lake Suwa (center)	26
Shizuoka Pref.		Shimizu Port	28
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	nd
	_	Nagoya Port	40
Mie Pref.	28	Yokkaichi Port	95
	29	Toba Port	nd
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	37
	31	Lake Biwa (center, offshore of Karasaki)	14
Kyoto Pref.		Miyazu Port	3
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	240
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	69
•	36	Mouth of Riv. Yodo (Osaka City)	240
	37	Osaka Port	380
	38	Outside Osaka Port	54
Hyogo Pref.		Offshore of Himeji	19
Kobe City	40	Kobe Port (center)	24
Nara Pref.	_	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(1)
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	15
Okayama Pref.		Offshore of Mizushima	5
Hiroshima Pref.		Kure Port	14
1111 00111111111 1 1 1 1 1 1 1 1 1 1 1		Hiroshima Bay	52
Yamaguchi Pref.		Tokuyama Bay	420
r amagaem r rer.		Offshore of Ube	37
		Offshore of Hagi	tr(2)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	79
Ehime Pref.		Niihama Port	5
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City			130
Fukuoka City		Hakata Bay	12
Saga Pref.		Imari Bay	14
Nagasaki Pref.		Omura Bay	3
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
011 - 0		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	77

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

# $[14\text{-}3\text{-}1]\ 2,2',4,4',5,5'\text{-}Hexabromodiphenyl ether (\#153)/sediment (pg/g-dry)$

Monitored year: 2022

Detection Frequency (site) : 40/61 (Missing value : 0) Detection Frequency (sample) : 40/61 (Missing value : 0)

	Aggregated value
Geometric mean	3
Median	tr(2)
Maximum	180
Minimum	nd

Hokkaido	Local communities	No.	Monitored sites	Aggregated value
2   Tomakomai Port   150     100   100   2   1   1   1   1   1   1   1   1   1	Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	
Invase Pref.   3   Toyosawa-bash Bridge, Riv. Toyosawa (Hanamaki City)		2		
Myagi Prof.   4   Sendai Bay (Missushima Bay)   4	Iwate Pref.	3		nd
Sendai City		_		
Akita Pref.   6   Lake Hachiro   tr(1)   tr(1)   Tunungata Pref.   7   Mouth of Riv. Mogami (Sakata City)   tr(1)   Fukushima Pref.   8   Onahama Port   33   33   33   33   33   34   35   34   35   34   35   35				·
Yamagana Prof.   7   Mouth of Riv. Mogami (Sakata City)   157   158				
Fukushima Pref.   8				
Bharaki Pref.   9   Tonekamome-obasi Bridge, Mouth of Riv. Tone (Kamisu City)   13   17   17   17   18   19   19   19   19   19   19   19				
Tachigi Pref.   10   Tagawa Kyubun Area Head Works (Usunomiya City)   tr(2)   Chiba Pref.   11   Coast of Ichibar and Angeasaki   9   Chiba City   12   Mouth of Riv. Hanami (Chiba City)   3   Tokyo Met.   13   Mouth of Riv. Hanami (Chiba City)   22   Yokohama City   14   Mouth of Riv. Arakawa (Koto Ward)   228   Yokohama City   15   Yokohama Port   6   Kawasaki City   16   Mouth of Riv. Tama (Kawasaki City)   9   To Front of Ougi Town, Reihin Canal, Port of Kawasaki   60   Niigata Pref.   18   Lower Riv. Shinano (Niigata City)   nd   Toyama Pref.   19   Hagiun-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)   nd   Shikawa Pref.   21   Mishima-bashi Bridge, Riv. Shono (Tsuruga City)   nd   Shikawa Pref.   22   Senshu-bashi Bridge, Riv. Shono (Tsuruga City)   nd   Shizuoka Pref.   23   Lake Suwa (center)   4   Shimizu Port   24   Shimizu Port   17   Za Kakesuka-bashi Bridge, Riv. Tenryu (Iwata City)   nd   Aichi Pref.   26   Kinutara Port   17   Za Kakesuka-bashi Bridge, Riv. Tenryu (Iwata City)   nd   Aichi Pref.   27   Nagova Port   nd   Xiyoto Pref.   28   Yokkaichi Port   17   Za Tagova Port   17   Z				
Chiba Pref.				
Chiba City				
Tokyo Met.		_	E	
14   Mouth of Riv. Sumida (Minato Ward)   28			` "	
Yokohama City         15         Yokohama Port         6           Kawasaki City         16         Mouth of Riv. Tama (Kawasaki City)         9           17         Front of Ougl Town, Keihin Canal, Port of Kawasaki         60           Niigata Pref.         18         Lower Riv. Shinano (Niigata City)         nd           Toyama Pref.         19         Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)         nd           Ishikawa Pref.         20         Mouth of Riv. Sai (Kanazawa City)         nd           Kukii Pref.         21         Mishima-bashi Bridge, Riv. Shono (Tsuruga City)         nd           Yamanashi Pref.         21         Senshu-bashi Bridge, Riv. Arakawa (Kofu City)         tr(1)           Yamanashi Pref.         22         Senshu-bashi Bridge, Riv. Tenryu (Iwata City)         nd           Aichi Pref.         23         Lake Suwa (center)         17           25         Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)         nd           Aichi Pref.         26         Kimuura Port         17           Aichi Pref.         27         Nagova Port         17           Mie Pref.         28         Yokakchi Port         17           Mie Pref.         29         Toba Port         17           Shiga Pre	Tokyo Met.		` /	
Kawasaki City			` '	
17   Front of Ougi Town, Keihin Canal, Port of Kawasaki   60     Niigata Pref.   18   Lower Riv. Shinano (Niigata City)   nd     Toyama Pref.   19   Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)   nd     Shikawa Pref.   20   Mouth of Riv. Sai (Kanazawa City)   nd     Yamanashi Pref.   21   Sai (Kanazawa City)   nd     Yamanashi Pref.   22   Seashu-bashi Bridge, Riv. Arakawa (Kofu City)   tr(1)     Nagano Pref.   23   Lake Suwa (center)   4     Nagano Pref.   24   Shimizu Port   17     25   Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)   nd     Aichi Pref.   26   Kinuura Port   17     27   Nagova Port   17     28   Yokaichi Port   17     29   Toba Port   17     29   Toba Port   17     31   Lake Biwa (center, offshore of Minamihira)   9     31   Lake Biwa (center, offshore of Karasaki)   3     33   Kyoto Pref.   32   Miyazu Port   18     Kyoto Pref.   33   Miyazu Port   19     Osaka Pref.   34   Mouth of Riv. Yamato (Sakai City)   120     Osaka City   35   Kema-bashi Bridge, Riv. Katsura (Kyoto City)   18     36   Mouth of Riv. Yamato (Sakai City)   19     37   Osaka Port   19     40   Kobe Port (center)   30   Otfshore of Hinneji   17     41   Totshima Pref.   41   Taisho-bashi Bridge, Riv. Yamato (Oji Town)   17     Wakayama Pref.   42   Kinokawa-obashi Bridge, Riv. Yamato (Oji Town)   17     Yamaguchi Pref.   43   Offshore of Hinneji   17     Yamaguchi Pref.   44   Kinokawa-obashi Bridge, Riv. Yamato (Oji Town)   17     Yamaguchi Pref.   45   Hinshima Bay   10     And Tokushima Pref.   46   Tokuyama Bay   16     And Tokushima Pref.   47   Hinshima Bay   10     And Tokushima Pref.   48   Offshore of Hagi   10     Tokushima Pref.   49   Mouth of Riv. Yoshino (Tokushima City)   10     Angasaki Pref.   51   Niama Port   10   10     Angasaki Pref.   52   Mouth of Riv. Oshino (Tokushima City)   10     Angasaki Pref.   55   Mouth of Riv. Oshino (Tokushima City)   10     Angasaki Pref.   56   Mouth of Riv. Oshio (Dita City)   10     Okinawa Pref.   61   Naha Port   10   10     Okinawa Pref.   61   Naha		_		
Niigata Pref.   18	Kawasaki City			9
Toyama Pref.   19				60
Ishikawa Pref.   20   Mouth of Riv. Sai (Kanzawa City)   6	Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	nd
Fukui Pref.         21         Mishima-bashi Bridge, Riv. Arakawa (Kofu City)         nd           Yamanashi Pref.         22         Senshu-bashi Bridge, Riv. Arakawa (Kofu City)         nt/1           Nagano Pref.         23         Lake Suwa (center)         4           Shizuoka Pref.         24         Shimizu Port         17           25         Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)         nd           Aichi Pref.         26         Kinuura Port         nd           Mie Pref.         28         Yokakichi Port         17           29         Toba Port         17         17           29         Toba Port         nd         17           Shiga Pref.         30         Lake Biwa (center, offshore of Minamihira)         9           Myoto City         33         Miyazua Port         nd           Kyoto City         33         Miyazua Port         nd           Kyoto City         34         Muth of Riv. Yamato (Sakai City)         120           Osaka Pref.         34         Muth of Riv. Yamato (Osaka City)         13           36         Muth of Riv. Yamato (Osaka City)         13           37         Osaka Port         120           Kobe City         40	Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Yamanashi Pref.         22         Senshu-bashi Bridge, Riv. Arakawa (Kofu City)         tr(1)           Nagano Pref.         23         Lake Suwa (center)         4           Nizuoka Pref.         24         Shimizu Port         17           Achi Pref.         25         Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)         nd           Achi Pref.         26         Kinuura Port         nd           27         Nagoya Port         tr(2)           Mie Pref.         28         Yokkaichi Port         nd           29         Toba Port         nd           Shiga Pref.         30         Lake Biwa (center, offshore of Minamihira)         9           31         Lake Biwa (center, offshore of Karasaki)         3           Kyoto Pref.         32         Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)         nd           Osaka Pref.         34         Muburh of Riv. Yamato (Sakai City)         120           Osaka City         35         Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         13           37         Osaka Port         120           Aboya Port.         39         Offshore of Himeji         tr(2)           Kobe City         40         Kobe City         40         Kobe Port (center)         3 <td>Ishikawa Pref.</td> <td>20</td> <td>Mouth of Riv. Sai (Kanazawa City)</td> <td>6</td>	Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	6
Nagano Pref.         23 Lake Suwa (center)         4           Shizuoka Pref.         25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)         nd           Aichi Pref.         26 Kinuura Port         nd           27 Nagoya Port         utc)           Mie Pref.         28 Yokkaichi Port         17           Shiga Pref.         30 Lake Biwa (center, offshore of Minamihira)         9           Shiga Pref.         31 Lake Biwa (center, offshore of Karasaki)         3           Kyoto Pref.         32 Miyazu Port         nd           Kyoto City         33 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)         nd           Osaka Pref.         34 Mouth of Riv. Yamato (Sakai City)         120           Osaka Pref.         35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         13           36 Mouth of Riv. Yamato (Sakai City)         180           37 Osaka Port         120           38 Outside Osaka Port         120           39 Offshore of Himeji         17           Kobe City         40 Kobe Port (center)         3           Nara Pref.         41 Taisho-bashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         17(1)           Wakayama Pref.         42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         17(1)           Wakayama Pref.	Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.         23 Lake Suwa (center)         4           Shizuoka Pref.         25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)         nd           Aichi Pref.         26 Kinuura Port         nd           27 Nagoya Port         utc)           Mie Pref.         28 Yokkaichi Port         17           Shiga Pref.         30 Lake Biwa (center, offshore of Minamihira)         9           Shiga Pref.         31 Lake Biwa (center, offshore of Karasaki)         3           Kyoto Pref.         32 Miyazu Port         nd           Kyoto City         33 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)         nd           Osaka Pref.         34 Mouth of Riv. Yamato (Sakai City)         120           Osaka Pref.         35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         13           36 Mouth of Riv. Yamato (Sakai City)         180           37 Osaka Port         120           38 Outside Osaka Port         120           39 Offshore of Himeji         17           Kobe City         40 Kobe Port (center)         3           Nara Pref.         41 Taisho-bashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         17(1)           Wakayama Pref.         42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         17(1)           Wakayama Pref.	Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(1)
25   Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	Nagano Pref.			4
25   Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)   nd	Shizuoka Pref.	24	Shimizu Port	17
Aichi Pref.         26         Kinuura Port         nd           27         Nagoya Port         tr(2)           Mie Pref.         28         Yokskichi Port         17           29         Toba Port         nd           Shiga Pref.         30         Lake Biwa (center, offshore of Minamihira)         9           31         Lake Biwa (center, offshore of Karasaki)         3           Kyoto Pref.         32         Miyazua Port         nd           Kyoto City         33         Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)         nd           Osaka Pref.         34         Mouth of Riv. Yamato (Sakai City)         120           Osaka City         35         Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         180           37         Osaka Port         180         37           38         Outside Osaka Port         180           40         Kobe City         40         Kobe Port (center)         3           8         Paramaper Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         tr(1)           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Riv. Yamato (Oji Town)         tr(1)           Hiroshima Pref.         42         Kinokawa-ohashi Bridge, Riv. Yamato (Oji Town)				nd
Mie Pref.   28   Yokkaichi Port   17   17   17   17   17   18   17   17	Aichi Pref			
Mie Pref.   28   Yokkaichi Port   17   29   Toba Port   18   18   18   18   19   19   19   18   18				
29   Toba Port	Mie Pref			
Shiga Pref.         30         Lake Biwa (center, offshore of Minamihira)         9           31         Lake Biwa (center, offshore of Karasaki)         3           Kyoto Pref.         32         Miyazua Port         nd           Kyoto City         33         Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)         nd           Osaka Pref.         34         Mouth of Riv. Yamato (Sakai City)         120           Osaka City         35         Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         13           36         Mouth of Riv. Yado (Osaka City)         120           37         Osaka Port         120           38         Mouth of Riv. Yodo (Osaka City)         13           39         Offshore of Himeji         tr(2)           Kobe City         40         Kobe Port (center)         3           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         tr(1)           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         tr(2)           Okayama Pref.         43         Mirashima Bay         nd           Yamaguchi Pref.         44         Kure Port         tr(1)           4         Kure Port         tr(1)           4         Hir	WHE I ICI.			
Same	Chigo Prof	_		
Kyoto Pref.         32         Miyazu Port         nd           Kyoto City         33         Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)         nd           Osaka Pref.         34         Mouth of Riv. Yamato (Sakai City)         120           Osaka City         35         Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         13           36         Mouth of Riv. Yodo (Osaka City)         180           37         Osaka Port         120           38         Outside Osaka Port         120           Kobe City         40         Kobe Port (center)         3           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         tr(2)           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         tr(1)           Wakayama Pref.         43         Offshore of Mizushima         tr(1)           Hiroshima Pref.         43         Offshore of Mizushima         tr(1)           Yamaguchi Pref.         46         Tokuyama Bay         5           Yamaguchi Pref.         46         Tokuyama Bay         5           Yamaguchi Pref.         46         Tokuyama Bay         5           Yamaguchi Pref.         47         Offshore of Hagi         nd	Siliga Fiel.			
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Osaka Pref.         34         Mouth of Riv. Yamato (Sakai City)         120           Osaka City         35         Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         18           36         Mouth of Riv. Yodo (Osaka City)         180           37         Osaka Port         120           38         Outside Osaka Port         33           Hyogo Pref.         39         Offshore of Himeji         tr(2)           Kobe City         40         Kobe Port (center)         3           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         tr(1)           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         tr(2)           Okayama Pref.         43         Offshore of Mizushima         tr(1)           Hiroshima Pref.         44         Kure Port         tr(1)           Hiroshima Bay         nd         nd           Yamaguchi Pref.         46         Tokuyama Bay         5           47         Offshore of Hagi         nd           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         nd           Kagawa Pref.         50         Takamatsu Port         9           Ehime Pref.         51				
Osaka City         35         Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)         18           36         Mouth of Riv. Yodo (Osaka City)         180           37         Osaka Port         120           38         Outside Osaka Port         33           Hyogo Pref.         39         Offshore of Himeji         tr(2)           Kobe City         40         Kobe Port (center)         3           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         tr(1)           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         tr(2)           Okayama Pref.         43         Offshore of Mizushima         tr(1)           Hiroshima Pref.         44         Kure Port         tr(1)           4         Kure Port         tr(1)           4         Hiroshima Bay         nd           4         Tokuyama Bay         f           4         Tokuyama Bay         f           4         Offshore of Hagi         nd           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         nd           Kagawa Pref.         51         Niihama Port         nd           Kochi Pref.         52		33	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	
36   Mouth of Riv. Yodo (Osaka City)   180   37   Osaka Port   320   Osaka Port   33   Outside Osaka Port   33   Outside Osaka Port   33   Offshore of Himeji   tr(2)   Kobe City   40   Kobe Port (center)   3   Shara Pref.   41   Taisho-bashi Bridge, Riv. Yamato (Oji Town)   tr(1)   Wakayama Pref.   42   Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)   tr(2)   Okayama Pref.   43   Offshore of Mizushima   tr(1)   tr(1)   Wamaguchi Pref.   44   Kure Port   tr(1)   tr				
37   Osaka Port   38   Outside Osaka Port   33   33     Hyogo Pref.   39   Offshore of Himeji   tr(2)     Kobe City   40   Kobe Port (center)   3   33     Nara Pref.   41   Taisho-bashi Bridge, Riv. Yamato (Oji Town)   tr(1)     Wakayama Pref.   42   Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)   tr(2)     Okayama Pref.   43   Offshore of Mizushima   tr(1)     Hiroshima Pref.   44   Kure Port   tr(1)     45   Hiroshima Bay   nd     Yamaguchi Pref.   46   Tokuyama Bay   5     47   Offshore of Ube   4     48   Offshore of Hagi   nd     Tokushima Pref.   49   Mouth of Riv. Yoshino (Tokushima City)   nd     Kagawa Pref.   50   Takamatsu Port   nd     Kochi Pref.   51   Niihama Port   nd     Kochi Pref.   52   Mouth of Riv. Shimanto (Shimanto City)   nd     Kitakyushu City   53   Dokai Bay   16     Fukuoka City   54   Hakata Bay   tr(1)     Saga Pref.   55   Imari Bay   nd     Nagasaki Pref.   56   Omura Bay   nd     Oita Pref.   57   Mouth of Riv. Oyodo (Miyazaki City)   nd     Miyazaki Pref.   58   Mouth of Riv. Oyodo (Miyazaki City)   nd     Okinawa Pref.   61   Naha Port   9	Osaka City			
38   Outside Osaka Port   33   33   33   34   34   35   35   35			†	
Hyogo Pref.         39         Offshore of Himeji         tr(2)           Kobe City         40         Kobe Port (center)         3           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         tr(1)           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         tr(2)           Okayama Pref.         43         Offshore of Mizushima         tr(1)           Hiroshima Pref.         44         Kure Port         tr(1)           45         Hiroshima Bay         nd           Yamaguchi Pref.         46         Tokuyama Bay         5           47         Offshore of Ube         4           48         Offshore of Hagi         nd           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         nd           Kagawa Pref.         50         Takamatsu Port         9           Ehime Pref.         51         Niihama Port         nd           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         nd           Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         nd           Saga Pref.         55				
Kobe City         40         Kobe Port (center)         3           Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         tr(1)           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         tr(2)           Okayama Pref.         43         Offshore of Mizushima         tr(1)           Hiroshima Pref.         44         Kure Port         tr(1)           44         Kure Port         tr(1)           45         Hiroshima Bay         nd           Yamaguchi Pref.         46         Tokuyama Bay         5           47         Offshore of Ube         4           48         Offshore of Hagi         nd           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         nd           Kagawa Pref.         50         Takamatsu Port         9           Ehime Pref.         51         Niihama Port         nd           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         nd           Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay				
Nara Pref.         41         Taisho-bashi Bridge, Riv. Yamato (Oji Town)         tr(1)           Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         tr(2)           Okayama Pref.         43         Offshore of Mizushima         tr(1)           Hiroshima Pref.         44         Kure Port         tr(1)           45         Hiroshima Bay         nd           Yamaguchi Pref.         46         Tokuyama Bay         5           47         Offshore of Ube         4           48         Offshore of Hagi         nd           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         nd           Kagawa Pref.         50         Takamatsu Port         9           Ehime Pref.         51         Niihama Port         nd           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         nd           Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         58				
Wakayama Pref.         42         Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)         tr(2)           Okayama Pref.         43         Offshore of Mizushima         tr(1)           Hiroshima Pref.         44         Kure Port         tr(1)           45         Hiroshima Bay         nd           Yamaguchi Pref.         46         Tokuyama Bay         5           47         Offshore of Ube         4           48         Offshore of Hagi         nd           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         nd           Kagawa Pref.         50         Takamatsu Port         9           Ehime Pref.         51         Niihama Port         nd           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         nd           Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv		_		3
Okayama Pref.         43         Offshore of Mizushima         tr(1)           Hiroshima Pref.         44         Kure Port         tr(1)           45         Hiroshima Bay         nd           Yamaguchi Pref.         46         Tokuyama Bay         5           47         Offshore of Ube         4           48         Offshore of Hagi         nd           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         nd           Kagawa Pref.         50         Takamatsu Port         9           Ehime Pref.         51         Niihama Port         nd           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         nd           Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)	Nara Pref.			tr(1)
Hiroshima Pref.	Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(2)
45   Hiroshima Bay   nd	Okayama Pref.	43	Offshore of Mizushima	tr(1)
Yamaguchi Pref.         46         Tokuyama Bay         5           47         Offshore of Ube         4           48         Offshore of Hagi         nd           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         nd           Kagawa Pref.         50         Takamatsu Port         9           Ehime Pref.         51         Niihama Port         nd           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         nd           Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           Okinawa Pref.         61         Naha Port         9	Hiroshima Pref.			tr(1)
Yamaguchi Pref.         46         Tokuyama Bay         5           47         Offshore of Ube         4           48         Offshore of Hagi         nd           Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         nd           Kagawa Pref.         50         Takamatsu Port         9           Ehime Pref.         51         Niihama Port         nd           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         nd           Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           Okinawa Pref.         61         Naha Port         9		45	Hiroshima Bay	nd
47       Offshore of Ube       4         48       Offshore of Hagi       nd         Tokushima Pref.       49       Mouth of Riv. Yoshino (Tokushima City)       nd         Kagawa Pref.       50       Takamatsu Port       9         Ehime Pref.       51       Niihama Port       nd         Kochi Pref.       52       Mouth of Riv. Shimanto (Shimanto City)       nd         Kitakyushu City       53       Dokai Bay       16         Fukuoka City       54       Hakata Bay       tr(1)         Saga Pref.       55       Imari Bay       nd         Nagasaki Pref.       56       Omura Bay       nd         Oita Pref.       57       Mouth of Riv. Oita (Oita City)       nd         Miyazaki Pref.       58       Mouth of Riv. Oyodo (Miyazaki City)       nd         Kagoshima Pref.       59       Riv. Amori (Kirishima City)       nd         Okinawa Pref.       61       Naha Port       9	Yamaguchi Pref.			5
Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         nd           Kagawa Pref.         50         Takamatsu Port         9           Ehime Pref.         51         Niihama Port         nd           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         nd           Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           Okinawa Pref.         61         Naha Port         9	_	47	Offshore of Ube	4
Tokushima Pref.         49         Mouth of Riv. Yoshino (Tokushima City)         nd           Kagawa Pref.         50         Takamatsu Port         9           Ehime Pref.         51         Niihama Port         nd           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         nd           Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           Okinawa Pref.         61         Naha Port         9		48	Offshore of Hagi	nd
Kagawa Pref.         50         Takamatsu Port         9           Ehime Pref.         51         Niihama Port         nd           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         nd           Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           Okinawa Pref.         61         Naha Port         9	Tokushima Pref.			
Ehime Pref.         51         Niihama Port         nd           Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         nd           Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           Okinawa Pref.         61         Naha Port         9				
Kochi Pref.         52         Mouth of Riv. Shimanto (Shimanto City)         nd           Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           Okinawa Pref.         61         Naha Port         9				nd
Kitakyushu City         53         Dokai Bay         16           Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           Okinawa Pref.         61         Naha Port         9				
Fukuoka City         54         Hakata Bay         tr(1)           Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           Okinawa Pref.         61         Naha Port         9		_		
Saga Pref.         55         Imari Bay         nd           Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           Okinawa Pref.         61         Naha Port         9				
Nagasaki Pref.         56         Omura Bay         nd           Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           60         Riv. Gotanda (Ichikikushikino City)         nd           Okinawa Pref.         61         Naha Port         9				
Oita Pref.         57         Mouth of Riv. Oita (Oita City)         nd           Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           60         Riv. Gotanda (Ichikikushikino City)         nd           Okinawa Pref.         61         Naha Port         9			,	
Miyazaki Pref.         58         Mouth of Riv. Oyodo (Miyazaki City)         nd           Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           60         Riv. Gotanda (Ichikikushikino City)         nd           Okinawa Pref.         61         Naha Port         9				
Kagoshima Pref.         59         Riv. Amori (Kirishima City)         nd           60         Riv. Gotanda (Ichikikushikino City)         nd           Okinawa Pref.         61         Naha Port         9				
60         Riv. Gotanda (Ichikikushikino City)         nd           Okinawa Pref.         61         Naha Port         9		_	2 \ 2 2/	
Okinawa Pref. 61 Naha Port 9	Kagoshima Pref.			
Olimetra 1 or				
(Note 1) Detection frequency (cite) is based on the number of cites thus many (the number of detected cites/the number of surroyard cites)		61		9

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

[14-3-2] 2,2',4,4',5,6'-Hexabromodiphenyl ether (#154) /sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 41/61 \text{ (Missing value}: 0) \\ \text{Detection Frequency (sample)}: 41/61 \text{ (Missing value}: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	tr(2)
Median	tr(2)
Maximum	56
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(1)
Hokkardo	2	Tomakomai Port	39
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	3
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	3
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(2)
Fukushima Pref.	8	Onahama Port	26
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	5
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(2)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	3
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(1)
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	23
	14	Mouth of Riv. Sumida (Minato Ward)	18
Yokohama City		Yokohama Port	8
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	4
		Front of Ougi Town, Keihin Canal, Port of Kawasaki	19
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	4
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(1)
Nagano Pref.		Lake Suwa (center)	7
Shizuoka Pref.		Shimizu Port	3
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	nd
		Nagoya Port	tr(2)
Mie Pref.		Yokkaichi Port	7
CI: D C		Toba Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	11
Vt- Df		Lake Biwa (center, offshore of Karasaki)	
Kyoto Pref. Kyoto City		Miyazu Port Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	26
Osaka Fier. Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	10
Osaka City		Mouth of Riv. Yodo (Osaka City)	56
		Osaka Port	9
		Outside Osaka Port	tr(2)
Hyogo Pref.		Offshore of Himeji	tr(2)
Kobe City		Kobe Port (center)	tr(2)
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	3
Okayama Pref.		Offshore of Mizushima	nd
Hiroshima Pref.	44	Kure Port	tr(2)
	45	Hiroshima Bay	6
Yamaguchi Pref.	46	Tokuyama Bay	33
	47	Offshore of Ube	7
	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	10
Ehime Pref.	51	Niihama Port	tr(1)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	15
Fukuoka City		Hakata Bay	tr(2)
Saga Pref.		Imari Bay	3
Nagasaki Pref.		Omura Bay	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	8

Okinawa Pref. 61 Naha Port
(Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [14-4] Heptabromodiphenyl ethers /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 39/61 (Missing value: 0)
Detection Frequency (sample): 39/61 (Missing value: 0)

	Aggregated value
Geometric mean	10
Median	12
Maximum	940
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(3)
	2	Tomakomai Port	12
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	15
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	tr(4)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	120
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	15
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	50
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	180
•	14	Mouth of Riv. Sumida (Minato Ward)	310
Yokohama City	15	Yokohama Port	50
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	20
,		Front of Ougi Town, Keihin Canal, Port of Kawasaki	57
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	55
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(7)
Nagano Pref.	23	Lake Suwa (center)	47
Shizuoka Pref.	24	Shimizu Port	tr(4)
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
	27	Nagoya Port	22
Mie Pref.	28	Yokkaichi Port	180
	29	Toba Port	nd
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	58
	31	Lake Biwa (center, offshore of Karasaki)	21
Kyoto Pref.	32	Miyazu Port	tr(4)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	180
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	87
,	36	Mouth of Riv. Yodo (Osaka City)	68
		Osaka Port	940
	38	Outside Osaka Port	27
Hyogo Pref.	39	Offshore of Himeji	16
Kobe City	40	Kobe Port (center)	27
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	12
Okayama Pref.	43	Offshore of Mizushima	tr(3)
Hiroshima Pref.		Kure Port	12
	45	Hiroshima Bay	35
Yamaguchi Pref.	46	Tokuyama Bay	170
	47	Offshore of Ube	19
	48	Offshore of Hagi	nd
Tokushima Pref.	_	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	100
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	130
Fukuoka City		Hakata Bay	tr(7)
Saga Pref.	55	Imari Bay	tr(4)
Nagasaki Pref.	56	Omura Bay	nd
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		Naha Port	100
(Note 1) Detection for		(its) is based on the number of sites thus many (the number of detected sites/the number	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

 $[14\text{-}4\text{-}1]\ 2,2',3,3',4,5',6\text{-}Heptabromodiphenyl ether (\#175) / sediment (pg/g-dry) \ and \ an$ 

[14-4-2] 2,2',3,4,4',5',6Heptabromodiphenyl ether (#183) /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 35/61 (Missing value : 0) Detection Frequency (sample) : 35/61 (Missing value : 0)

	Aggregated value
Geometric mean	tr(6)
Median	tr(4)
Maximum	820
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(3)
	2	Tomakomai Port	12
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	15
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	63
baraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(6)
Госhigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	32
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Гокуо Met.	13	Mouth of Riv. Arakawa (Koto Ward)	88
-	14	Mouth of Riv. Sumida (Minato Ward)	130
Yokohama City	15	Yokohama Port	21
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	10
Ť		Front of Ougi Town, Keihin Canal, Port of Kawasaki	20
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	nd
Гоуата Pref.	_	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
shikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	14
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(3)
Nagano Pref.		Lake Suwa (center)	22
Shizuoka Pref.	_	Shimizu Port	nd
J		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	_	Kinuura Port	nd
uciii i ici.		Nagoya Port	tr(7)
Mie Pref.	_	Yokkaichi Port	140
viic i ici.		Toba Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	34
siliga Fiel.		Lake Biwa (center, offshore of Karasaki)	8
Vt- Df	_		
Kyoto Pref.		Miyazu Port	tr(4)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	73
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	25
		Mouth of Riv. Yodo (Osaka City)	68
		Osaka Port	820
		Outside Osaka Port	20
Hyogo Pref.	_	Offshore of Himeji	8
Kobe City	40		19
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(4)
Okayama Pref.	_	Offshore of Mizushima	tr(3)
Hiroshima Pref.		Kure Port	tr(4)
	45	Hiroshima Bay	8
Yamaguchi Pref.		Tokuyama Bay	26
		Offshore of Ube	19
		Offshore of Hagi	nd
Γokushima Pref.	_	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	23
Ehime Pref.		Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	43
Fukuoka City	54	Hakata Bay	nd
Saga Pref.	55	Imari Bay	nd
Nagasaki Pref.		Omura Bay	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
	_	Mouth of Riv. Oyodo (Miyazaki City)	nd
Miyazaki Pref.			
Miyazaki Pref. Kagoshima Pref.	_	Riv. Amori (Kirishima City)	nd
Miyazaki Pref. Kagoshima Pref.	59	Riv. Amori (Kirishima City) Riv. Gotanda (Ichikikushikino City)	nd nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [14-5] Octabromodiphenyl ethers /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 45/61 (Missing value: 0)
Detection Frequency (sample): 45/61 (Missing value: 0)

	Aggregated value
Geometric mean	31
Median	49
Maximum	1,600
Minimum	nd

Local communities	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	16
	2	Tomakomai Port	28
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	49
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	24
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	31
Fukushima Pref.	8	Onahama Port	250
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	110
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	13
Chiba Pref.		Coast of Ichihara and Anegasaki	130
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	14
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	430
TORYO MEL.		Mouth of Riv. Sumida (Minato Ward)	720
Yokohama City		Yokohama Port	150
	_		91
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	
NT' · D C	_	Front of Ougi Town, Keihin Canal, Port of Kawasaki	190
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	13
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	360
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	63
Nagano Pref.		Lake Suwa (center)	140
Shizuoka Pref.		Shimizu Port	20
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(3)
Aichi Pref.	26	Kinuura Port	nd
	27	Nagoya Port	220
Mie Pref.	28	Yokkaichi Port	390
	29	Toba Port	25
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	130
	31	Lake Biwa (center, offshore of Karasaki)	71
Kyoto Pref.	32	Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	490
Osaka City	_	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	300
osana eng		Mouth of Riv. Yodo (Osaka City)	480
		Osaka Port	1,000
		Outside Osaka Port	86
Hyogo Pref.	39	Offshore of Himeji	81
Kobe City		Kobe Port (center)	62
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	_		84
Okayama Pref.	_	Offshore of Mizushima	10
	_	Kure Port	57
Hiroshima Pref.			
1'D C		Hiroshima Bay	160
Yamaguchi Pref.		Tokuyama Bay	1,600
		Offshore of Ube	58
T 1 11 D 0		Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	420
Ehime Pref.	51	Niihama Port	16
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	_	Dokai Bay	440
Fukuoka City		Hakata Bay	30
Saga Pref.	_	Imari Bay	34
Nagasaki Pref.	56	Omura Bay	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
	57	Mouth of Riv. Oita (Oita City)  Mouth of Riv. Oyodo (Miyazaki City)	nd nd
Oita Pref. Miyazaki Pref.	57 58		
Oita Pref.	57 58 59	Mouth of Riv. Oyodo (Miyazaki City)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [14-6] Nonabromodiphenyl ethers /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 56/61 (Missing value : 0) Detection Frequency (sample) : 56/61 (Missing value : 0)

	Aggregated value
Geometric mean	340
Median	510
Maximum	43,000
Minimum	nd

Local communities	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	120
	2	Tomakomai Port	130
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	570
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	18
Akita Pref.	6	Lake Hachiro	100
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	380
Fukushima Pref.	8	Onahama Port	1,700
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2,200
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	64
Chiba Pref.	_	Coast of Ichihara and Anegasaki	1,800
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	120
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	3,500
Tokyo Wict.		Mouth of Riv. Anakawa (Noto Ward)	5,000
Yokohama City	_	Yokohama Port	1,300
			990
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	1,700
N" . D C		Front of Ougi Town, Keihin Canal, Port of Kawasaki	
Niigata Pref.		Lower Riv. Shinano (Niigata City)	230
Toyama Pref.			26
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	7,600
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	27
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	700
Nagano Pref.	23	Lake Suwa (center)	940
Shizuoka Pref.	24		200
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	92
Aichi Pref.	26	Kinuura Port	97
	27	Nagoya Port	5,500
Mie Pref.	28	Yokkaichi Port	3,900
	29	Toba Port	200
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	520
		Lake Biwa (center, offshore of Karasaki)	510
Kyoto Pref.	_	Miyazu Port	110
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	61
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	2,600
Osaka City	_	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	5,000
Osuku City		Mouth of Riv. Yodo (Osaka City)	5,400
		Osaka Port	7,800
		Outside Osaka Port	1,200
Hyogo Pref.		Offshore of Himeii	620
Kobe City		Kobe Port (center)	720
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	26
Wakayama Pref.			2,200
		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	
Okayama Pref.		Offshore of Mizushima	140
Hiroshima Pref.		Kure Port	760
** 1:5 0		Hiroshima Bay	1,800
Yamaguchi Pref.		Tokuyama Bay	43,000
		Offshore of Ube	650
	_		39
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	5,500
Ehime Pref.	51	Niihama Port	160
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	110
Kitakyushu City	53	Dokai Bay	4,600
Fukuoka City	54	Hakata Bay	510
Saga Pref.	55	Imari Bay	390
Nagasaki Pref.	56	Omura Bay	120
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	tr(12)
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	_	Riv. Amori (Kirishima City)	nd
		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		Naha Port	3,200
	- 51		2,200

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

#### [14-7] Decabromodiphenyl ether /sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 61/61 \; (Missing \; value: 0) \\ \text{Detection Frequency (sample)}: 61/61 \; (Missing \; value: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	3,300
Median	4,100
Maximum	410,000
Minimum	tr(17)

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1,000
	2	Tomakomai Port	1,300
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	40
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	4,900
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	94
Akita Pref.	6	Lake Hachiro	770
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	3,200
Fukushima Pref.	8	Onahama Port	14,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	20,000
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	410
Chiba Pref.		Coast of Ichihara and Anegasaki	16,000
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	1,200
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	64,000
Tokyo Met.		Mouth of Riv. Sumida (Minato Ward)	75,000
V-11	_		15,000
Yokohama City	_	Yokohama Port	
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	8,600
	_	Front of Ougi Town, Keihin Canal, Port of Kawasaki	22,000
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	1,600
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	170
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	81,000
Fukui Pref.	_	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	200
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	6,000
Nagano Pref.	_	Lake Suwa (center)	6,200
Shizuoka Pref.		Shimizu Port	1,900
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	740
Aichi Pref.	26	Kinuura Port	930
	27	Nagoya Port	71,000
Mie Pref.	28	Yokkaichi Port	41,000
	29	Toba Port	2,000
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	3,700
	31	Lake Biwa (center, offshore of Karasaki)	4,300
Kyoto Pref.	_	Miyazu Port	950
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	460
Osaka Pref.			41,000
Osaka City	_	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	44,000
		Mouth of Riv. Yodo (Osaka City)	47,000
		Osaka Port	190,000
		Outside Osaka Port	18,000
Hyogo Pref.	39	Offshore of Himeji	5,300
Kobe City		Kobe Port (center)	14,000
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	200
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	29,000
Okayama Pref.	43	Offshore of Mizushima	1,200
Hiroshima Pref.			7,000
imosiiiiia Piei.		Kure Port Hiroshima Bay	13,000
V 1'D C			410,000
Yamaguchi Pref.		Tokuyama Bay	
		Offshore of Ube	8,200
T 1 1' D C		Offshore of Hagi	250
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	71
Kagawa Pref.	_	Takamatsu Port	40,000
Ehime Pref.	51	Niihama Port	1,400
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	950
Kitakyushu City	53	Dokai Bay	65,000
Fukuoka City		Hakata Bay	4,100
Saga Pref.	_	Imari Bay	3,300
Nagasaki Pref.		Omura Bay	740
Oita Pref.		Mouth of Riv. Oita (Oita City)	130
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	tr(17)
Kagoshima Pref.		Riv. Amori (Kirishima City)	62
	60	Riv. Gotanda (Ichikikushikino City)	tr(19)
Okinawa Pref.		Naha Port	47,000

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

#### [15] Perfluorooctane sulfonic acid (PFOS)/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 61/61 (Missing value : 0) Detection Frequency (sample) : 61/61 (Missing value : 0)

	Aggregated value
Geometric mean	55
Median	61
Maximum	710
Minimum	tr(5)

T1	NI.	Manitana Laitan	A11
Local communities Hokkaido	1	Monitored sites  Tabileanikalkalkala Paidea Month of Riv. Tabileani (Tabileani City)	Aggregated value 45
ноккатао	2	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)  Tomakomai Port	130
Iwate Pref.		Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	28
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	63
Sendai City		Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	48
Akita Pref.		Lake Hachiro	59
Yamagata Pref.		Mouth of Riv. Mogami (Sakata City)	46
Fukushima Pref.	8	Onahama Port	22
Ibaraki Pref.		Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	75
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	61
Chiba Pref.		Coast of Ichihara and Anegasaki	270
Chiba City		Mouth of Riv. Hanami (Chiba City)	16
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	260
,		Mouth of Riv. Sumida (Minato Ward)	710
Yokohama City		Yokohama Port	210
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	60
, and the second		Front of Ougi Town, Keihin Canal, Port of Kawasaki	180
Niigata Pref.		Lower Riv. Shinano (Niigata City)	27
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	11
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	61
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	24
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	35
Nagano Pref.	23	Lake Suwa (center)	140
Shizuoka Pref.	24	Shimizu Port	16
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	27
Aichi Pref.	26	Kinuura Port	11
	27	Nagoya Port	59
Mie Pref.	28	Yokkaichi Port	70
	_	Toba Port	65
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	320
	31	Lake Biwa (center, offshore of Karasaki)	180
Kyoto Pref.	_	Miyazu Port	13
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	48
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	390
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	190
		Mouth of Riv. Yodo (Osaka City)	100
		Osaka Port	110
	_	Outside Osaka Port	85
Hyogo Pref.		Offshore of Himeji	97
Kobe City		Kobe Port (center)	110
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	150
Wakayama Pref.			21
Okayama Pref.		Offshore of Mizushima	51 99
Hiroshima Pref.		Kure Port	
77 1 ' D C		Hiroshima Bay	84
Yamaguchi Pref.		Tokuyama Bay Offshore of Ube	110 28
	_	Offshore of Hagi	16
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(8)
Kagawa Pref.		Takamatsu Port	70
Ehime Pref.	51	Niihama Port	70
Kochi Pref.	_	Mouth of Riv. Shimanto (Shimanto City)	tr(5)
Kitakyushu City	53	Dokai Bay	67
Fukuoka City		Hakata Bay	78
Saga Pref.			33
Nagasaki Pref.		Omura Bay	260
Oita Pref.		Mouth of Riv. Oita (Oita City)	12
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	tr(7)
Kagoshima Pref.		Riv. Amori (Kirishima City)	9
1245001111111111111111111111111111111111		Riv. Gotanda (Ichikikushikino City)	15
Okinawa Pref.	61	Naha Port	110

Okinawa Pref. 61 Naha Port 1
(Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

#### [16] Perfluorooctanoic acid (PFOA)/sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 61/61 \; (Missing \; value: 0) \\ \text{Detection Frequency (sample)}: 61/61 \; (Missing \; value: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	29
Median	26
Maximum	370
Minimum	tr(5)

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	14
	2	Tomakomai Port	23
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	48
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	39
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	22
Akita Pref.	6	Lake Hachiro	26
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	13
Fukushima Pref.	8	Onahama Port	26
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	25
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	13
Chiba Pref.		Coast of Ichihara and Anegasaki	51
Chiba City		Mouth of Riv. Hanami (Chiba City)	8
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	31
TORYO WIEL.		Mouth of Riv. Sumida (Minato Ward)	42
Yokohama City		Yokohama Port	28
			12
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	60
NT'' / D C		Front of Ougi Town, Keihin Canal, Port of Kawasaki	
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(6)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(5)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	32
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	22
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	16
Nagano Pref.		Lake Suwa (center)	23
Shizuoka Pref.		Shimizu Port	31
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	17
Aichi Pref.	_	Kinuura Port	7
		Nagoya Port	23
Mie Pref.	28	Yokkaichi Port	22
	29	Toba Port	46
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	100
	31	Lake Biwa (center, offshore of Karasaki)	71
Kyoto Pref.		Miyazu Port	57
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	32
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	100
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	120
-	36	Mouth of Riv. Yodo (Osaka City)	47
	37	Osaka Port	370
	38	Outside Osaka Port	63
Hyogo Pref.		Offshore of Himeji	45
Kobe City	40	Kobe Port (center)	39
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	67
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	15
Okayama Pref.	_	Offshore of Mizushima	41
Hiroshima Pref.	_	Kure Port	22
		Hiroshima Bay	20
Yamaguchi Pref.		Tokuyama Bay	29
		Offshore of Ube	18
		Offshore of Hagi	67
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	14
Kagawa Pref.		Takamatsu Port	31
Ehime Pref.		Niihama Port	26
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	16
Kitakyushu City		Dokai Bay	34
Fukuoka City		Hakata Bay	77
Saga Pref.		Imari Bay	91
Nagasaki Pref.	_	Omura Bay	150
Oita Pref.		Mouth of Riv. Oita (Oita City)	150
			18
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	
Kagoshima Pref.		Riv. Amori (Kirishima City)	7
O1: P. C		Riv. Gotanda (Ichikikushikino City)	10
Okinawa Pref.	61	Naha Port	14

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

#### [17] Pentachlorobenzene/sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 61/61 \; (Missing \; value: 0) \\ \text{Detection Frequency (sample)}: 61/61 \; (Missing \; value: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	24
Median	25
Maximum	1,300
Minimum	tr(0.5)

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	81
Tokkurdo	2	Tomakomai Port	32
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	15
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	64
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	1.5
Akita Pref.	6	Lake Hachiro	16
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	34
Fukushima Pref.	8	Onahama Port	1,300
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	100
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	4.6
Chiba Pref.	11	Coast of Ichihara and Anegasaki	60
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	3.9
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	300
	14	Mouth of Riv. Sumida (Minato Ward)	180
Yokohama City	15	Yokohama Port	66
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	52
		Front of Ougi Town, Keihin Canal, Port of Kawasaki	370
Niigata Pref.		Lower Riv. Shinano (Niigata City)	43
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	15
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	76
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	31
Yamanashi Pref.		67 \ 17	9.0
Nagano Pref.		Lake Suwa (center)	160
Shizuoka Pref.		Shimizu Port	25
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	14
Aichi Pref.		Kinuura Port	1.6
		Nagoya Port	11
Mie Pref.		Yokkaichi Port	57
CI: D C		Toba Port	27
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	59 19
Vt- Df		Lake Biwa (center, offshore of Karasaki)	3.6
Kyoto Pref. Kyoto City		Miyazu Port Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	21
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	76
Osaka Fier. Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	93
Osaka City		Mouth of Riv. Yodo (Osaka City)	68
		Osaka Port	200
		Outside Osaka Port	32
Hyogo Pref.		Offshore of Himeji	32
Kobe City		Kobe Port (center)	25
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	1.0
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	35
Okayama Pref.		Offshore of Mizushima	7.9
Hiroshima Pref.		Kure Port	22
	45	Hiroshima Bay	7.7
Yamaguchi Pref.	46	Tokuyama Bay	35
	47	Offshore of Ube	13
	48	Offshore of Hagi	3.0
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	7.5
Kagawa Pref.	50	Takamatsu Port	39
Ehime Pref.	51	Niihama Port	180
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	20
Kitakyushu City	53	Dokai Bay	1,300
Fukuoka City		Hakata Bay	9.1
Saga Pref.		-	24
Nagasaki Pref.		Omura Bay	18
Oita Pref.		Mouth of Riv. Oita (Oita City)	1.4
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	3.0
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	0.9
011 - 2		Riv. Gotanda (Ichikikushikino City)	tr(0.5)
Okinawa Pref.	61	Naha Port	15

Okinawa Pref. 61 Naha Port (Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

#### [19] 1,2,5,6,9,10-Hexabromocyclododecanes /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 33/61 (Missing value: 0)
Detection Frequency (sample): 33/61 (Missing value: 0)

	Aggregated value
Geometric mean	580
Median	tr(320)
Maximum	38,000
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	710
	2	Tomakomai Port	1,900
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(520)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(240)
Fukushima Pref.	8	Onahama Port	4,600
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1,100
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	2,300
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	2,700
	14	Mouth of Riv. Sumida (Minato Ward)	14,000
Yokohama City	15	Yokohama Port	tr(480)
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	4,300
	17	Front of Ougi Town, Keihin Canal, Port of Kawasaki	3,800
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	1,400
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		` /	3,900
Shizuoka Pref.	24	Shimizu Port	nd
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	nd
		Nagoya Port	1,200
Mie Pref.		Yokkaichi Port	37,000
	29	Toba Port	1,600
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	750
		Lake Biwa (center, offshore of Karasaki)	tr(320)
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	38,000
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	8,800
		Mouth of Riv. Yodo (Osaka City)	7,800
		Osaka Port	5,200
	_	Outside Osaka Port	760
Hyogo Pref.			990
Kobe City	40		1,600
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	2,300
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(290)
Okayama Pref.	43	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	1,500
V1' D. C		Hiroshima Bay	7,800
Yamaguchi Pref.		Tokuyama Bay Offshore of Ube	nd
			nd 4
T 1 1' D C	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd 4,000
Kagawa Pref. Ehime Pref.	50	Takamatsu Port	
Kochi Pref.	51	Niihama Port Mouth of Riv. Shimonto (Shimonto City)	nd
	52	Mouth of Riv. Shimanto (Shimanto City)	nd 690
Kitakyushu City	53	Dokai Bay	
Fukuoka City	_	Hakata Bay Imari Bay	nd nd
Saga Pref. Nagasaki Pref.		Omura Bay	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd nd
Miyazaki Pref.		Mouth of Riv. Otta (Otta City)  Mouth of Riv. Oyodo (Miyazaki City)	nd
			nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
Okinowa Brof		Riv. Gotanda (Ichikikushikino City)	nd 14,000
Okinawa Pref.	61	Naha Port	14,000

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

<sup>(</sup>Note 5) \*: Indicates the sum value of the Quantification [Detection] limits of each target chemicals.

[19-1]  $\alpha$  -1,2,5,6,9,10-Hexabromocyclododecane /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 41/61 (Missing value: 0) Detection Frequency (sample): 41/61 (Missing value: 0)

	Aggregated value
Geometric mean	230
Median	190
Maximum	9,600
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	500
	2	Tomakomai Port	330
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	350
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	tr(100)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	200
Fukushima Pref.	8	Onahama Port	810
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(90)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(150)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	1,800
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	1,300
	14	Mouth of Riv. Sumida (Minato Ward)	9,600
Yokohama City		Yokohama Port	210
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	3,000
		Front of Ougi Town, Keihin Canal, Port of Kawasaki	2,300
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	190
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	750
Fukui Pref.			nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	2,200
Shizuoka Pref.	_	Shimizu Port	tr(70)
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	nd
		Nagoya Port	370
Mie Pref.		Yokkaichi Port	4,900
		Toba Port	1,100
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	430
		Lake Biwa (center, offshore of Karasaki)	180
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.	_	Mouth of Riv. Yamato (Sakai City)	3,700
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	2,900
		Mouth of Riv. Yodo (Osaka City)	1,500
		Osaka Port	2,800
		Outside Osaka Port	370
Hyogo Pref.		Offshore of Himeji	520
Kobe City	_	Kobe Port (center)	290
Nara Pref.	_	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	360
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(80)
Okayama Pref.	43		nd
Hiroshima Pref.		Kure Port	460
1' D C	+	Hiroshima Bay	1,300
Yamaguchi Pref.	46	Tokuyama Bay	tr(120)
	47	Offshore of Ube	nd
T. 1 . 1 . D. C		Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.			2,200
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd 200
Kitakyushu City		Dokai Bay	300
Fukuoka City		Hakata Bay	tr(110)
Saga Pref.		Imari Bay	160
Nagasaki Pref.	56	Omura Bay	tr(120)
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	_	3 \ 3 \ 3/	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
01: 7: 0		27	nd
Okinawa Pref.	61	Naha Port	9,300

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

[19-2]  $\beta$  -1,2,5,6,9,10-Hexabromocyclododecane /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 30/61 (Missing value : 0) Detection Frequency (sample) : 30/61 (Missing value : 0)

Detection limit: 40 Quantification limit: 100

	Aggregated value
Geometric mean	tr(70)
Median	nd
Maximum	4,000
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(70)
	2	Tomakomai Port	430
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	nd
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	170
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(40)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	270
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	280
	14	Mouth of Riv. Sumida (Minato Ward)	1,700
Yokohama City		Yokohama Port	tr(50)
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	570
	17	Front of Ougi Town, Keihin Canal, Port of Kawasaki	400
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	180
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	23	Lake Suwa (center)	400
Shizuoka Pref.	24	Shimizu Port	nd
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
	27	Nagoya Port	tr(90)
Mie Pref.	28	Yokkaichi Port	4,000
		Toba Port	220
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	tr(70)
	31	Lake Biwa (center, offshore of Karasaki)	tr(50)
Kyoto Pref.		Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	770
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	840
		Mouth of Riv. Yodo (Osaka City)	250
	37	Osaka Port	420
		Outside Osaka Port	tr(80)
Hyogo Pref.	39	Offshore of Himeji	110
Kobe City	40	Kobe Port (center)	tr(50)
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	100
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	43	Offshore of Mizushima	nd
Hiroshima Pref.	44	Kure Port	140
	45	Hiroshima Bay	750
Yamaguchi Pref.	46	Tokuyama Bay	nd
	47	Offshore of Ube	nd
	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	410
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(80)
Fukuoka City	54	Hakata Bay	nd
Saga Pref.	55	Imari Bay	nd
Nagasaki Pref.	56	Omura Bay	nd
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	1,900
(Note 1) Detection from		[Nana Port]	1,500

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

(Note 4) nd: Not detected

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

[19-3]  $\gamma$  -1,2,5,6,9,10-Hexabromocyclododecane /sediment (pg/g-dry)

Monitored year: 2022

 $\begin{array}{l} \text{Detection Frequency (site)}: 41/61 \text{ (Missing value}: 0) \\ \text{Detection Frequency (sample)}: 41/61 \text{ (Missing value}: 0) \\ \end{array}$ 

	Aggregated value
Geometric mean	170
Median	170
Maximum	33,000
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	140
	2	Tomakomai Port	1,100
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	170
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	100
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(40)
Fukushima Pref.	8	Onahama Port	3,600
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1,000
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	230
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	1,100
	14	Mouth of Riv. Sumida (Minato Ward)	2,800
Yokohama City	15	Yokohama Port	220
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	700
Ť		Front of Ougi Town, Keihin Canal, Port of Kawasaki	1,100
Niigata Pref.		Lower Riv. Shinano (Niigata City)	70
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(40)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	460
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	23	Lake Suwa (center)	1,300
Shizuoka Pref.	24	Shimizu Port	tr(30)
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	_	Kinuura Port	nd
	27	Nagoya Port	710
Mie Pref.	28	Yokkaichi Port	28,000
		Toba Port	260
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	250
		Lake Biwa (center, offshore of Karasaki)	90
Kyoto Pref.	_	Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	170
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	33,000
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	5,100
		Mouth of Riv. Yodo (Osaka City)	6,100
		Osaka Port	2,000
	38	Outside Osaka Port	310
Hyogo Pref.		Offshore of Himeji	360
Kobe City	40	Kobe Port (center)	1,300
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	1,800
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	210
Okayama Pref.		Offshore of Mizushima	nd
Hiroshima Pref.	44	Kure Port	870
		Hiroshima Bay	5,700
Yamaguchi Pref.		Tokuyama Bay	nd
		Offshore of Ube	nd
		Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	_	Takamatsu Port	1,400
Ehime Pref.	51	Niihama Port	210
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	310
Fukuoka City	54	Hakata Bay	tr(60)
Saga Pref.	_	Imari Bay	nd
Nagasaki Pref.		Omura Bay	80
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	_	Riv. Amori (Kirishima City)	nd
1205001111101111011		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		Naha Port	3,000
OKINAWA I ICI.	01	THERE I VII	5,000

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

## [19-4] $\delta$ -1,2,5,6,9,10-Hexabromocyclododecane /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 1/61 (Missing value: 0) Detection Frequency (sample): 1/61 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(70)
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Hokkuldo	2	Tomakomai Port	nd
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	nd
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	nd
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	nd
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
		Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City		Yokohama Port	nd
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	nd
		Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref. Shizuoka Pref.		Lake Suwa (center)	nd
Snizuoka Pref.		Shimizu Port	nd
Aichi Pref.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port	nd
Alcili Piel.		Nagoya Port	nd nd
Mie Pref.		Yokkaichi Port	nd
Wife I lei.		Toba Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	nd
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	_	Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(70)
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
		Mouth of Riv. Yodo (Osaka City)	nd
	37	Osaka Port	nd
	38	Outside Osaka Port	nd
Hyogo Pref.	39	Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.		Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
V 1:D 0		Hiroshima Bay	nd
Yamaguchi Pref.		Tokuyama Bay	nd
	47	Offshore of Ube	nd
Tokushima Pref.	48	Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	nd nd
Kagawa Pref.	_	Takamatsu Port	nd
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	nd
Fukuoka City		Hakata Bay	nd
Saga Pref.		Imari Bay	nd
Nagasaki Pref.		Omura Bay	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		Naha Port	nd

Okinawa Pref. 61 Naha Port rote 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

[19-5]  $\varepsilon$  -1,2,5,6,9,10-Hexabromocyclododecane /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 0/61 (Missing value: 0) Detection Frequency (sample): 0/61 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido		Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
	2	Tomakomai Port	nd
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	nd
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.		Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	nd
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	nd
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
	14	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	15	Yokohama Port	nd
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	nd
	17	Front of Ougi Town, Keihin Canal, Port of Kawasaki	nd
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	23	Lake Suwa (center)	nd
Shizuoka Pref.	24	Shimizu Port	nd
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
	27	Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
	29	Toba Port	nd
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	nd
C		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
		Mouth of Riv. Yodo (Osaka City)	nd
		Osaka Port	nd
	38	Outside Osaka Port	nd
Hyogo Pref.		Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okavama Pref.		Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
111100111111111111111111111111111111111		Hiroshima Bay	nd
Yamaguchi Pref.		Tokuyama Bay	nd
I amagacini i ici.		Offshore of Ube	nd
		Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	nd
Ehime Pref.		Niihama Port	nd
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Fukuoka City		Hakata Bay	nd
Saga Pref.		Imari Bay	nd
Nagasaki Pref.		Omura Bay Mouth of Riv. Oita (Oita Cita)	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
01: 5 0		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	nd

Okinawa Pref. 61 Naha Port note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) nd: Not detected

### [21] Hexachlorobuta-1,3-diene /sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 4/61 (Missing value: 0) Detection Frequency (sample): 4/61 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	370
Minimum	nd

			т
Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
T . D C	2	Tomakomai Port	nd
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	nd
Sendai City Akita Pref.		Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd nd
Fukushima Pref.	8	Onahama Port	370
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	nd
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	30
Tokyo Wici.		Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City		Yokohama Port	nd
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	nd
Tan madani City		Front of Ougi Town, Keihin Canal, Port of Kawasaki	40
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Tovama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	23	Lake Suwa (center)	nd
Shizuoka Pref.		Shimizu Port	nd
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
	27	Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
		Toba Port	nd
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	nd
	31	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	32	Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
		Mouth of Riv. Yodo (Osaka City)	nd
		Osaka Port	nd
	_	Outside Osaka Port	nd
Hyogo Pref.		Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	_	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	_	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
** 1:5 0		Hiroshima Bay	nd
Yamaguchi Pref.		Tokuyama Bay	nd
		Offshore of Ube	nd
T-1		Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref. Ehime Pref.		Takamatsu Port Niihama Port	nd 170
		Mouth of Riv. Shimanto (Shimanto City)	170
Kochi Pref. Kitakyushu City		Dokai Bav	nd nd
Fukuoka City		Hakata Bay	nd
Saga Pref.		Imari Bay	nd
Nagasaki Pref.		Omura Bay	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Ona (Ona City)  Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
Kagosiiiiia Fiei.		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		Naha Port	nd
OKIIIawa I IUI.	UΙ	I valia I Oit	114

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

### [23] Short-chain chlorinated paraffins/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 53/61 (Missing value: 0)
Detection Frequency (sample): 53/61 (Missing value: 0)

	Aggregated value
Geometric mean	3,100
Median	1,800
Maximum	60,000
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(1,100)
	2	Tomakomai Port	7,600
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	1,500
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	tr(970)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(800)
Fukushima Pref.	8	Onahama Port	9,600
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(1,200)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(700)
Chiba Pref.		Coast of Ichihara and Anegasaki	2,400
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	1,400
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	29.000
Tokyo Wict.		Mouth of Riv. Sumida (Minato Ward)	60,000
Yokohama City	_	Yokohama Port	36,000
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	3,600
Kawasaki City		Front of Ougi Town, Keihin Canal, Port of Kawasaki	27,000
Niigata Buof	_	Lower Riv. Shinano (Niigata City)	tr(1,200)
Niigata Pref.	_	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	tr(670)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	. (/
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	6,000
Fukui Pref.	_	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(1,100)
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	1,700
Nagano Pref.		Lake Suwa (center)	3,000
Shizuoka Pref.		Shimizu Port	tr(1,200)
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	10,000
Aichi Pref.		Kinuura Port	tr(1,200)
	_	Nagoya Port	15,000
Mie Pref.		Yokkaichi Port	2,200
	_	Toba Port	38,000
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	7,200
	31	Lake Biwa (center, offshore of Karasaki)	1,600
Kyoto Pref.		Miyazu Port	tr(670)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(580)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	37,000
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	38,000
	36	Mouth of Riv. Yodo (Osaka City)	56,000
		Osaka Port	27,000
	38	Outside Osaka Port	17,000
Hyogo Pref.	39	Offshore of Himeji	1,900
Kobe City	40	Kobe Port (center)	31,000
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(580)
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,400
Okayama Pref.	43	Offshore of Mizushima	10,000
Hiroshima Pref.	44	Kure Port	26,000
		Hiroshima Bay	1,800
Yamaguchi Pref.		Tokuyama Bay	6,600
		Offshore of Ube	1,600
		Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	_	Takamatsu Port	34,000
Ehime Pref.	51	Niihama Port	2,500
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(1,100)
Kitakyushu City	53	Dokai Bay	23,000
Fukuoka City	_	Hakata Bay	tr(1,100)
		Imari Bay	10,000
Saga Pref. Nagasaki Pref.	_	Omura Bay	tr(1,000)
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
011 - 0		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	46,000

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4)  $\operatorname{nd}$ : Not detected

<sup>(</sup>Note 5) \*: Indicates the sum value of the Quantification [Detection] limits of each substance with the same number of carbons in the alkyl group.

### [23-1] Chlorinated decanes/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 48/61 (Missing value : 0) Detection Frequency (sample) : 48/61 (Missing value : 0)

	Aggregated value
Geometric mean	300
Median	tr(180)
Maximum	6,500
Minimum	nd

Local communities	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
	2	Tomakomai Port	580
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(90)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	tr(70)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	690
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(80)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	tr(180)
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	3,300
Tokyo Wict.		Mouth of Riv. Sumida (Minato Ward)	3,000
Yokohama City		Yokohama Port	4,800
	_		240
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	5,800
N" , D C	_	Front of Ougi Town, Keihin Canal, Port of Kawasaki	
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	tr(110)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(70)
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	520
Fukui Pref.	_	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(80)
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(100)
Nagano Pref.		Lake Suwa (center)	290
Shizuoka Pref.		Shimizu Port	tr(80)
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	630
Aichi Pref.	26	Kinuura Port	tr(90)
	27	Nagoya Port	3,600
Mie Pref.	28	Yokkaichi Port	330
	29	Toba Port	6,400
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	740
	31	Lake Biwa (center, offshore of Karasaki)	tr(160)
Kyoto Pref.	32	Miyazu Port	tr(70)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(80)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	6,500
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	3,800
·		Mouth of Riv. Yodo (Osaka City)	4,700
		Osaka Port	2,700
		Outside Osaka Port	4,700
Hyogo Pref.	39	Offshore of Himeji	220
Kobe City		Kobe Port (center)	4,700
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(80)
Wakayama Pref.	_		tr(150)
Okayama Pref.	43	Offshore of Mizushima	690
Hiroshima Pref.	_	Kure Port	5,600
Tiliosillila Tiel.		Hiroshima Bay	tr(140)
Yamaguchi Pref.			850
i amagucini Piei.		Tokuyama Bay Offshore of Ube	210
		Offshore of Hagi	
T-1			nd
Tokushima Pref.	_	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	_	Takamatsu Port	1,600
Ehime Pref.	51	Niihama Port	490
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	3,900
Fukuoka City		Hakata Bay	tr(70)
Saga Pref.		Imari Bay	580
Nagasaki Pref.		Omura Bay	tr(110)
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	5,200

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

### [23-2] Chlorinated undecanes/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 57/61 (Missing value: 0) Detection Frequency (sample): 57/61 (Missing value: 0)

	Aggregated value
Geometric mean	700
Median	300
Maximum	16,000
Minimum	nd

Local communities	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	300
	2	Tomakomai Port	1,600
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	tr(100)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	300
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(100)
Akita Pref.	6	Lake Hachiro	tr(200)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(200)
Fukushima Pref.	8	Onahama Port	1,200
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(200)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(200)
Chiba Pref.	_	Coast of Ichihara and Anegasaki	400
Chiba City		Mouth of Riv. Hanami (Chiba City)	300
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	8,600
TORYO MICE.		Mouth of Riv. Sumida (Minato Ward)	16,000
Yokohama City		Yokohama Port	14,000
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	800
Kawasaki City		Front of Ougi Town, Keihin Canal, Port of Kawasaki	8,000
Nii D	_		
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	tr(200)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(100)
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	1,200
Fukui Pref.	_	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(200)
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	300
Nagano Pref.		Lake Suwa (center)	800
Shizuoka Pref.		Shimizu Port	300
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	1,200
Aichi Pref.	_	Kinuura Port	tr(200)
		Nagoya Port	4,600
Mie Pref.		Yokkaichi Port	500
		Toba Port	4,500
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	1,400
	31	Lake Biwa (center, offshore of Karasaki)	300
Kyoto Pref.		Miyazu Port	tr(100)
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) tr(	
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City) 9,100	
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	8,100
	36	Mouth of Riv. Yodo (Osaka City)	9,700
		Osaka Port	8,500
	38	Outside Osaka Port	6,300
Hyogo Pref.	39	Offshore of Himeji	300
Kobe City	40	Kobe Port (center)	9,900
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(100)
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(200)
Okayama Pref.		Offshore of Mizushima	1,300
Hiroshima Pref.	44	Kure Port	5,200
	45	Hiroshima Bay	400
Yamaguchi Pref.		Tokuyama Bay	900
Ü	47	Offshore of Ube	300
		Offshore of Hagi	tr(200)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	5,000
Ehime Pref.	_	Niihama Port	500
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	300
Kitakyushu City			
Fukuoka City	_		
Saga Pref.		Imari Bay 1,600	
Nagasaki Pref.	_	56 Omura Bay tr	
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	_	Riv. Amori (Kirishima City)	nd
ragosiiiila 1 ICI.		Riv. Gotanda (Ichikikushikino City)	tr(100)
Okinawa Pref.		Naha Port	9,300
(Note 1) Detection for	01	Nana Port	9,300

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

### [23-3] Chlorinated dodecanes/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site): 53/61 (Missing value: 0) Detection Frequency (sample): 53/61 (Missing value: 0)

Detection limit : 200 Quantification limit : 400

	Aggregated value
Geometric mean	900
Median	500
Maximum	19,000
Minimum	nd

Local communities	s No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	400
	2	Tomakomai Port	2,300
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	400
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	400
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(300)
Fukushima Pref.	8	Onahama Port	3,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(300)
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(200)
Chiba Pref.		Coast of Ichihara and Anegasaki	800
Chiba City		Mouth of Riv. Hanami (Chiba City)	400
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	11.000
Tokyo Met.		Mouth of Riv. Sumida (Minato Ward)	19,000
Yokohama City		Yokohama Port	10,000
	_		800
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	6,000
N" , D C	_	Front of Ougi Town, Keihin Canal, Port of Kawasaki	
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	400
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(200)
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	1,900
Fukui Pref.	_	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(300)
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	400
Nagano Pref.		Lake Suwa (center)	800
Shizuoka Pref.		Shimizu Port	tr(300)
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	2,700
Aichi Pref.	26	Kinuura Port	tr(300)
	27	Nagoya Port	4,800
Mie Pref.	28	Yokkaichi Port	500
	29	Toba Port	13,000
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	2,400
	31	Lake Biwa (center, offshore of Karasaki)	500
Kyoto Pref.	32	Miyazu Port	tr(200)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(200)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City) 9,400	
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	12,000
·		Mouth of Riv. Yodo (Osaka City)	14,000
		Osaka Port	6,600
		Outside Osaka Port	2,000
Hyogo Pref.	39	Offshore of Himeji	500
Kobe City		Kobe Port (center)	7,600
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(200)
Wakayama Pref.	_		400
Okayama Pref.	43	Offshore of Mizushima	2,800
Hiroshima Pref.	_	Kure Port	5,900
rmosimia rici.		Hiroshima Bay	400
Yamaguchi Pref.		Tokuyama Bay	2,200
i amagucin i iei.		Offshore of Ube	400
		Offshore of Hagi	
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
	_	· • • • • • • • • • • • • • • • • • • •	nd
Kagawa Pref.	_	Takamatsu Port	9,900
Ehime Pref.	51	Niihama Port	500
Kochi Pref.	52		
Kitakyushu City	53		
Fukuoka City			
Saga Pref.		5 Imari Bay 3,00	
Nagasaki Pref.		Omura Bay	tr(300)
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	12,000

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

### [23-4] Chlorinated tridecanes/sediment (pg/g-dry)

Monitored year: 2022

Detection Frequency (site) : 54/61 (Missing value : 0) Detection Frequency (sample) : 54/61 (Missing value : 0)

Detection limit : 200 Quantification limit : 500

	Aggregated value
Geometric mean	1,200
Median	900
Maximum	28,000
Minimum	nd

Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(400)
	2	Tomakomai Port	3,100
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	700
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	tr(300)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(300)
Fukushima Pref.	8	Onahama Port	4,700
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	600
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(300)
Chiba Pref.	_	Coast of Ichihara and Anegasaki	1,000
Chiba City		Mouth of Riv. Hanami (Chiba City)	700
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	5,700
Tokyo Ivici.		Mouth of Riv. Sumida (Minato Ward)	22,000
Yokohama City	_	Yokohama Port	7,100
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	1,800
Kawasaki City		Front of Ougi Town, Keihin Canal, Port of Kawasaki	6,900
Niigata Buof	_	Lower Riv. Shinano (Niigata City)	500
Niigata Pref.	_	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	tr(300)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	` '
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	2,400
Fukui Pref.	_	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	500
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	900
Nagano Pref.	_	Lake Suwa (center)	1,100
Shizuoka Pref.		Shimizu Port	500
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	5,900
Aichi Pref.		Kinuura Port	600
	_	Nagoya Port	2,300
Mie Pref.		Yokkaichi Port	900
	_	Toba Port	14,000
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	2,700
	31	Lake Biwa (center, offshore of Karasaki)	600
Kyoto Pref.		Miyazu Port	tr(300)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City) 12,000	
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	14,000
	36	Mouth of Riv. Yodo (Osaka City)	28,000
		Osaka Port	9,500
	38	Outside Osaka Port	3,800
Hyogo Pref.	39	Offshore of Himeji	900
Kobe City	40	Kobe Port (center)	8,600
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(200)
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	600
Okayama Pref.	43	Offshore of Mizushima	5,200
Hiroshima Pref.	44	Kure Port	9,000
	45	Hiroshima Bay	900
Yamaguchi Pref.		Tokuyama Bay	2,700
	47	Offshore of Ube	700
		Offshore of Hagi	tr(200)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	17,000
Ehime Pref.	51	Niihama Port	1,000
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	600
Kitakyushu City	53	Dokai Bay	7,900
Fukuoka City	_		
Saga Pref. Nagasaki Pref.	_		
			tr(400)
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
011 - 0		Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	20,000

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

### $[25]\ Perfluorohexane\ sulfonic\ acid\ (PFHxS)\ / sediment\ (pg/g-dry)$

Monitored year: 2022

Detection Frequency (site) : 28/61 (Missing value : 0) Detection Frequency (sample) : 28/61 (Missing value : 0)

	Aggregated value
Geometric mean	tr(3)
Median	nd
Maximum	16
Minimum	nd

			T
Local communities	No.	Monitored sites	Aggregated value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
T . D C	2	Tomakomai Port	tr(5)
Iwate Pref.	3	Toyosawa-bashi Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref. Sendai City	4	Sendai Bay (Matsushima Bay)	nd
Akita Pref.		Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd nd
Fukushima Pref.	8	Onahama Port	nd
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(4)
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	10
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	11
Tokyo Wici.		Mouth of Riv. Sumida (Minato Ward)	13
Yokohama City		Yokohama Port	tr(5)
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	tr(5)
Tawasan City		Front of Ougi Town, Keihin Canal, Port of Kawasaki	8
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	7
Shizuoka Pref.		Shimizu Port	nd
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	nd
	27	Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
		Toba Port	nd
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	8
	31	Lake Biwa (center, offshore of Karasaki)	7
Kyoto Pref.	32	Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	9
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	tr(5)
		Mouth of Riv. Yodo (Osaka City)	nd
		Osaka Port	tr(4)
		Outside Osaka Port	tr(3)
Hyogo Pref.		Offshore of Himeji	tr(5)
Kobe City		Kobe Port (center)	tr(4)
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	7
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	_	Offshore of Mizushima	tr(3)
Hiroshima Pref.		Kure Port	7
** 1:5 0		Hiroshima Bay	tr(3)
Yamaguchi Pref.		Tokuyama Bay	tr(5)
		Offshore of Ube	nd
T 1 1' D C		Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref. Ehime Pref.		Takamatsu Port Niihama Port	tr(3)
	_		nd
Kochi Pref. Kitakyushu City	52		
			tr(4)
Fukuoka City		Hakata Bay	tr(5)
Saga Pref.		Imari Bay Omura Bay	tr(4)
Nagasaki Pref.		Mouth of Riv. Oita (Oita City)	
Oita Pref. Miyazaki Pref.		Mouth of Riv. Oyta (Otta City)  Mouth of Riv. Oyodo (Miyazaki City)	nd nd
			+
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd nd
Okinawa Pref.		Riv. Gotanda (Ichikikushikino City) Naha Port	tr(5)
Okiliawa Piel.	UΙ	prana i oit	u(3)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples (Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

### [1] Total Polychlorinated biphenyls (Total PCBs)/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	9,000
Median	7,300
Maximum	200,000
Minimum	230

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	1,000	9,200	190,000
Median	490	7,100	
Maximum	10,000	150,000	200,000
Minimum	230	600	190,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	490
	Yokohama City	2	Yokohama Port	Blue mussel	10,000
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	230
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	2,800
		2		Chum salmon	1,900
	Iwate Pref.	3	Yamada Bay	Greenling	3,100
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	6,900
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	4,100
	Tokyo Met.	6	Tokyo Bay	Sea bass	39,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	45,000
	Nagoya City	8	Nagoya Port	Striped mullet	4,400
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	18,000
	Osaka Pref.	10	Osaka Bay	Sea bass	52,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	150,000
	Tottori Pref.	12	Nakaumi	Sea bass	7,300
	Hiroshima City	13	Hiroshima Bay	Sea bass	24,000
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	56,000
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	650
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	20,000
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	6,000
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	600
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	190,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	200,000
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	23,000,000
		value		Egg of Great Cormorant (Egg white)	21,000

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) \*: Indicates the sum value of the Quantification [Detection] limits of each congeners.

### [1-1] Monochlorobiphenyls/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 17/23 (Missing value: 0) Detection Frequency (sample): 17/23 (Missing value: 0)

	Aggregated value
Geometric mean	1.1
Median	tr(0.6)
Maximum	20
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	16/18	0/2
Detection Frequency (sample)	1/3	16/18	0/2
Geometric mean	0.8	1.4	nd
Median	nd	1.5	
Maximum	20	11	nd
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	20
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(0.3)
		2		Chum salmon	tr(0.5)
	Iwate Pref.	3	Yamada Bay	Greenling	tr(0.5)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(0.6)
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	2.6
	Tokyo Met.	6	Tokyo Bay	Sea bass	7.9
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	4.6
	Nagoya City	8	Nagoya Port	Striped mullet	4.1
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	tr(0.3)
	Osaka Pref.	10	Osaka Bay	Sea bass	9.7
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	11
	Tottori Pref.	12	Nakaumi	Sea bass	tr(0.6)
	Hiroshima City	13	Hiroshima Bay	Sea bass	1.9
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	10
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	3.0
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	1.1
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-2] Dichlorobiphenyls/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 22/23 (Missing value: 0) Detection Frequency (sample): 22/23 (Missing value: 0)

Detection limit : 2 Quantification limit : 4

	Aggregated value
Geometric mean	19
Median	15
Maximum	290
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	1/2
Detection Frequency (sample)	3/3	18/18	1/2
Geometric mean	15	26	nd
Median	8	19	
Maximum	130	290	tr(2)
Minimum	tr(3)	tr(2)	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	8
	Yokohama City	2	Yokohama Port	Blue mussel	130
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(3)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	5
		2		Chum salmon	7
	Iwate Pref.	3	Yamada Bay	Greenling	9
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	15
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	18
	Tokyo Met.	6	Tokyo Bay	Sea bass	240
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	180
	Nagoya City	8	Nagoya Port	Striped mullet	57
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	7
	Osaka Pref.	10	Osaka Bay	Sea bass	220
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	230
	Tottori Pref.	12	Nakaumi	Sea bass	20
	Hiroshima City	13	Hiroshima Bay	Sea bass	32
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	290
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(2)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	25
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	11
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(3)
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	tr(2)
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
İ		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

## [1-3] Trichlorobiphenyls/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	320
Median	230
Maximum	9,900
Minimum	3.1

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	59	310	5,200
Median	22	210	
Maximum	1,000	5,600	9,900
Minimum	9.4	3.1	2,700

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	22
	Yokohama City	2	Yokohama Port	Blue mussel	1,000
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	9.4
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	91
		2		Chum salmon	150
	Iwate Pref.	3	Yamada Bay	Greenling	89
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	190
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	190
	Tokyo Met.	6	Tokyo Bay	Sea bass	4,700
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	5,500
	Nagoya City	8	Nagoya Port	Striped mullet	350
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	230
	Osaka Pref.	10	Osaka Bay	Sea bass	3,500
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	5,600
	Tottori Pref.	12	Nakaumi	Sea bass	190
	Hiroshima City	13	Hiroshima Bay	Sea bass	440
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	4,100
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	15
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	290
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	68
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	3.1
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	9,900
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	2,700
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,300,000
		value		Egg of Great Cormorant (Egg white)	1,800

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

### [1-4] Tetrachlorobiphenyls/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	1,300
Median	1,000
Maximum	30,000
Minimum	27

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	180	1,300	21,000
Median	63	960	
Maximum	3,300	26,000	30,000
Minimum	28	27	15,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	63
	Yokohama City	2	Yokohama Port	Blue mussel	3,300
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	28
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	350
		2		Chum salmon	430
	Iwate Pref.	3	Yamada Bay	Greenling	250
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	920
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	670
	Tokyo Met.	6	Tokyo Bay	Sea bass	14,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	16,000
	Nagoya City	8	Nagoya Port	Striped mullet	1,000
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	2,000
	Osaka Pref.	10	Osaka Bay	Sea bass	12,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	26,000
	Tottori Pref.	12	Nakaumi	Sea bass	880
	Hiroshima City	13	Hiroshima Bay	Sea bass	2,300
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	10,000
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	63
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	1,500
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	400
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	27
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	30,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	15,000
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	3,600,000
		value		Egg of Great Cormorant (Egg white)	4,100

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

### [1-4-1] 3,3',4,4'-Tetrachlorobiphenyl (#77) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0)
Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	9.0
Median	8.7
Maximum	110
Minimum	tr(0.4)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	3.1	9.2	36
Median	1.4	7.6	
Maximum	18	110	44
Minimum	1.2	tr(0.4)	30

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	1.2
	Yokohama City	2	Yokohama Port	Blue mussel	18
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	1.4
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	1.5
		2		Chum salmon	2.4
	Iwate Pref.	3	Yamada Bay	Greenling	4.8
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	4.6
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	6.4
	Tokyo Met.	6	Tokyo Bay	Sea bass	46
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	61
	Nagoya City	8	Nagoya Port	Striped mullet	8.7
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	42
	Osaka Pref.	10	Osaka Bay	Sea bass	56
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	110
	Tottori Pref.	12	Nakaumi	Sea bass	4.2
	Hiroshima City	13	Hiroshima Bay	Sea bass	14
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	63
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	1.2
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	11
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	3.5
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(0.4)
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	44
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	30
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	740
		value		Egg of Great Cormorant (Egg white)	0.8

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

### [1-4-2] 3,4,4',5-Tetrachlorobiphenyl (#81) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 19/23 (Missing value: 0)
Detection Frequency (sample): 19/23 (Missing value: 0)

	Aggregated value
Geometric mean	1.7
Median	1.4
Maximum	44
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	16/18	2/2
Detection Frequency (sample)	1/3	16/18	2/2
Geometric mean	tr(0.3)	1.7	29
Median	nd	1.3	
Maximum	2.6	23	44
Minimum	nd	nd	19

Local communities	No.	Monitored sites	Wildlife species	Measured value
Iwate Pref.	1	Yamada Bay	Blue mussel	nd
Yokohama City	2	Yokohama Port	Blue mussel	2.6
Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(0.4)
	2		Chum salmon	tr(0.5)
Iwate Pref.	3	Yamada Bay	Greenling	tr(0.5)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	1.0
Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	1.4
Tokyo Met.	6	Tokyo Bay	Sea bass	9.7
Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	11
Nagoya City	8	Nagoya Port	Striped mullet	1.2
Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	8.3
Osaka Pref.	10	Osaka Bay	Sea bass	12
Hyogo Pref.	11	Offshore of Himeji	Sea bass	23
Tottori Pref.	12	Nakaumi	Sea bass	0.9
Hiroshima City	13	Hiroshima Bay	Sea bass	3.3
Kagawa Pref.	14	Takamatsu Port	Striped mullet	8.4
Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	1.7
Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	1.0
Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	44
Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	19
Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,400
	value		Egg of Great Cormorant (Egg white)	1.7
	Iwate Pref. Yokohama City Ishikawa Pref. Hokkaido  Iwate Pref. Miyagi Pref. Ibaraki Pref. Tokyo Met. Kawasaki City Nagoya City Shiga Pref. Osaka Pref. Hyogo Pref. Tottori Pref. Hiroshima City Kagawa Pref. Kochi Pref. Oita Pref. Cokinawa Pref. Shiga Pref. Tottori Pref. Hyogo Pref. Tottori Pref. Hyogo Pref. Kagoshima Pref. Okinawa Pref. Shiga Pref. Tottori Pref. Hyogo Pref.	Iwate Pref.         1           Yokohama City         2           Ishikawa Pref.         3           Hokkaido         1           2         Iwate Pref.         3           Miyagi Pref.         4           Ibaraki Pref.         5           Tokyo Met.         6           Kawasaki City         7           Nagoya City         8           Shiga Pref.         9           Osaka Pref.         10           Hyogo Pref.         11           Tottori Pref.         12           Hiroshima City         13           Kagawa Pref.         14           Kochi Pref.         15           Oita Pref.         16           Kagoshima Pref.         17           Okinawa Pref.         18           Shiga Pref.         1           Tottori Pref.         2           Hyogo Pref.         Reference value	Iwate Pref.       1       Yamada Bay         Yokohama City       2       Yokohama Port         Ishikawa Pref.       3       Coast of Noto Peninsula         Hokkaido       1       Offshore of Kushiro         Iwate Pref.       3       Yamada Bay         Miyagi Pref.       4       Sendai Bay (Matsushima Bay)         Ibaraki Pref.       5       Offshore of Joban         Tokyo Met.       6       Tokyo Bay         Kawasaki City       7       Offshore of Ogishima Island, Port of         Nagoya City       8       Nagoya Port         Shiga Pref.       9       Lake Biwa, Riv. Ado         Osaka Pref.       10       Osaka Bay         Hyogo Pref.       11       Offshore of Himeji         Tottori Pref.       12       Nakaumi         Hiroshima City       13       Hiroshima Bay         Kagawa Pref.       14       Takamatsu Port         Kochi Pref.       15       Mouth of Riv. Shimanto (Shimanto City)         Oita Pref.       16       Mouth of Riv. Oita (Oita City)         Kagoshima Pref.       17       West Coast of Satsuma Peninsula         Okinawa Pref.       18       Nakagusuku Bay         Shiga Pref.       1       <	Iwate Pref.       1       Yamada Bay       Blue mussel         Yokohama City       2       Yokohama Port       Blue mussel         Ishikawa Pref.       3       Coast of Noto Peninsula       Blue mussel         Hokkaido       1       Offshore of Kushiro       Rock greenling         Iwate Pref.       3       Yamada Bay       Greenling         Miyagi Pref.       4       Sendai Bay (Matsushima Bay)       Greenling         Ibaraki Pref.       5       Offshore of Joban       Chub mackerel         Tokyo Met.       6       Tokyo Bay       Sea bass         Kawasaki City       7       Offshore of Ogishima Island, Port of       Sea bass         Nagoya City       8       Nagoya Port       Striped mullet         Shiga Pref.       9       Lake Biwa, Riv. Ado       Dace         Osaka Pref.       10       Osaka Bay       Sea bass         Hyogo Pref.       11       Offshore of Himeji       Sea bass         Tottori Pref.       12       Nakaumi       Sea bass         Kagawa Pref.       14       Takamatsu Port       Striped mullet         Koch Pref.       15       Mouth of Riv. Shimanto (Shimanto City)       Sea bass         Oita Pref.       16

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-5] Pentachlorobiphenyls/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	2,300
Median	2,100
Maximum	63,000
Minimum	54

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	270	2,400	54,000
Median	120	2,000	
Maximum	3,000	44,000	63,000
Minimum	54	70	47,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	120
	Yokohama City	2	Yokohama Port	Blue mussel	3,000
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	54
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	850
		2		Chum salmon	630
	Iwate Pref.	3	Yamada Bay	Greenling	620
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	1,800
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	1,300
	Tokyo Met.	6	Tokyo Bay	Sea bass	11,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	14,000
	Nagoya City	8	Nagoya Port	Striped mullet	1,100
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	6,500
	Osaka Pref.	10	Osaka Bay	Sea bass	15,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	44,000
	Tottori Pref.	12	Nakaumi	Sea bass	2,100
	Hiroshima City	13	Hiroshima Bay	Sea bass	5,500
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	11,000
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	180
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	3,800
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	1,500
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	70
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	47,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	63,000
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	5,500,000
		value		Egg of Great Cormorant (Egg white)	5,400

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

### [1-5-1] 2,3,3',4,4'-Pentachlorobiphenyl (#105) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	130
Median	120
Maximum	10,000
Minimum	2.9

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	13	120	8,400
Median	5.8	120	
Maximum	140	1,500	10,000
Minimum	2.9	5.6	7,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	5.8
	Yokohama City	2	Yokohama Port	Blue mussel	140
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	2.9
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	66
		2		Chum salmon	25
	Iwate Pref.	3	Yamada Bay	Greenling	43
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	120
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	74
	Tokyo Met.	6	Tokyo Bay	Sea bass	350
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	560
	Nagoya City	8	Nagoya Port	Striped mullet	61
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	450
	Osaka Pref.	10	Osaka Bay	Sea bass	530
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	1,500
	Tottori Pref.	12	Nakaumi	Sea bass	66
	Hiroshima City	13	Hiroshima Bay	Sea bass	220
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	530
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	15
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	140
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	110
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	5.6
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	7,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	10,000
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	520,000
		value		Egg of Great Cormorant (Egg white)	550

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

### [1-5-2] 2,3,4,4',5-Pentachlorobiphenyl (#114) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 21/23 (Missing value: 0) Detection Frequency (sample): 21/23 (Missing value: 0)

	Aggregated value
Geometric mean	8.6
Median	7.9
Maximum	1,000
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	18/18	2/2
Detection Frequency (sample)	1/3	18/18	2/2
Geometric mean	tr(0.6)	8.1	790
Median	nd	7.9	
Maximum	5.5	150	1,000
Minimum	nd	tr(0.5)	630

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	5.5
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	5.3
		2		Chum salmon	2.6
	Iwate Pref.	3	Yamada Bay	Greenling	2.5
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	7.9
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	7.6
	Tokyo Met.	6	Tokyo Bay	Sea bass	25
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	18
	Nagoya City	8	Nagoya Port	Striped mullet	3.9
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	35
	Osaka Pref.	10	Osaka Bay	Sea bass	34
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	150
	Tottori Pref.	12	Nakaumi	Sea bass	2.6
	Hiroshima City	13	Hiroshima Bay	Sea bass	12
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	31
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	1.0
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	7.9
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	10
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(0.5)
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	630
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	1,000
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	53,000
		value		Egg of Great Cormorant (Egg white)	35

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-5-3] 2,3',4,4',5-Pentachlorobiphenyl (#118) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	460
Median	430
Maximum	27,000
Minimum	13

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	48	430	23,000
Median	18	400	
Maximum	480	7,300	27,000
Minimum	13	17	20,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	18
	Yokohama City	2	Yokohama Port	Blue mussel	480
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	13
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	200
		2		Chum salmon	84
	Iwate Pref.	3	Yamada Bay	Greenling	120
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	430
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	240
	Tokyo Met.	6	Tokyo Bay	Sea bass	1,600
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	2,500
	Nagoya City	8	Nagoya Port	Striped mullet	200
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	1,200
	Osaka Pref.	10	Osaka Bay	Sea bass	2,300
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	7,300
	Tottori Pref.	12	Nakaumi	Sea bass	360
	Hiroshima City	13	Hiroshima Bay	Sea bass	820
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	2,000
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	38
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	560
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	350
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	17
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	20,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	27,000
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	2,400,000
		value		Egg of Great Cormorant (Egg white)	2,400

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

### [1-5-4] 2',3,4,4',5-Pentachlorobiphenyl (#123) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 20/23 (Missing value: 0) Detection Frequency (sample): 20/23 (Missing value: 0)

	Aggregated value
Geometric mean	8.0
Median	7.4
Maximum	580
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	17/18	2/2
Detection Frequency (sample)	1/3	17/18	2/2
Geometric mean	tr(0.7)	7.6	480
Median	nd	6.8	
Maximum	7.4	110	580
Minimum	nd	nd	400

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	7.4
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	2.6
		2		Chum salmon	1.8
	Iwate Pref.	3	Yamada Bay	Greenling	2.3
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	7.7
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	5.1
	Tokyo Met.	6	Tokyo Bay	Sea bass	21
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	32
	Nagoya City	8	Nagoya Port	Striped mullet	4.1
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	28
	Osaka Pref.	10	Osaka Bay	Sea bass	43
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	110
	Tottori Pref.	12	Nakaumi	Sea bass	5.0
	Hiroshima City	13	Hiroshima Bay	Sea bass	16
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	41
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(0.9)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	15
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	5.8
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	400
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	580
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	35,000
		value		Egg of Great Cormorant (Egg white)	28

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

### [1-5-5] 3,3',4,4',5-Pentachlorobiphenyl (#126) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 20/23 (Missing value: 0) Detection Frequency (sample): 20/23 (Missing value: 0)

	Aggregated value
Geometric mean	4.0
Median	5.0
Maximum	100
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	17/18	2/2
Detection Frequency (sample)	1/3	17/18	2/2
Geometric mean	tr(0.5)	4.1	81
Median	nd	5.1	
Maximum	2.8	35	100
Minimum	nd	nd	65

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	2.8
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	1.8
		2		Chum salmon	tr(0.8)
	Iwate Pref.	3	Yamada Bay	Greenling	1.5
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	3.0
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	5.0
	Tokyo Met.	6	Tokyo Bay	Sea bass	7.6
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	8.1
	Nagoya City	8	Nagoya Port	Striped mullet	2.1
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	19
	Osaka Pref.	10	Osaka Bay	Sea bass	13
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	35
	Tottori Pref.	12	Nakaumi	Sea bass	2.3
	Hiroshima City	13	Hiroshima Bay	Sea bass	8.1
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	14
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(0.8)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	11
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	5.2
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	100
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	65
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	5,800
		value		Egg of Great Cormorant (Egg white)	3.7

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-6] Hexachlorobiphenyls/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	3,100
Median	2,800
Maximum	92,000
Minimum	110

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	370	3,100	83,000
Median	210	3,000	
Maximum	2,200	51,000	92,000
Minimum	110	210	74,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	210
	Yokohama City	2	Yokohama Port	Blue mussel	2,200
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	110
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	1,100
		2		Chum salmon	540
	Iwate Pref.	3	Yamada Bay	Greenling	1,300
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	2,800
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	1,400
	Tokyo Met.	6	Tokyo Bay	Sea bass	7,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	7,300
	Nagoya City	8	Nagoya Port	Striped mullet	1,200
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	7,000
	Osaka Pref.	10	Osaka Bay	Sea bass	15,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	51,000
	Tottori Pref.	12	Nakaumi	Sea bass	3,100
	Hiroshima City	13	Hiroshima Bay	Sea bass	10,000
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	17,000
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	280
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	8,900
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	2,700
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	210
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	74,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	92,000
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	8,700,000
		value		Egg of Great Cormorant (Egg white)	7,000

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

### $[1\text{-}6\text{-}1]\ 2,3,3',4,4',5\text{-}Hexachlorobiphenyl}\ (\#156)\ /wildlife\ (pg/g\text{-}wet)$

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	48
Median	40
Maximum	3,900
Minimum	1.5

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	3.8	46	3,200
Median	1.8	50	
Maximum	20	740	3,900
Minimum	1.5	3.9	2,600

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	1.8
	Yokohama City	2	Yokohama Port	Blue mussel	20
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	1.5
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	21
		2		Chum salmon	4.9
	Iwate Pref.	3	Yamada Bay	Greenling	17
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	40
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	25
	Tokyo Met.	6	Tokyo Bay	Sea bass	110
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	150
	Nagoya City	8	Nagoya Port	Striped mullet	18
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	160
	Osaka Pref.	10	Osaka Bay	Sea bass	220
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	740
	Tottori Pref.	12	Nakaumi	Sea bass	27
	Hiroshima City	13	Hiroshima Bay	Sea bass	92
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	220
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	7.6
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	77
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	59
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	3.9
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	2,600
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	3,900
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	360,000
		value		Egg of Great Cormorant (Egg white)	240

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

[1-6-2] 2,3,3',4,4',5'-Hexachlorobiphenyl (#157) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	14
Median	14
Maximum	960
Minimum	tr(0.6)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	tr(1.3)	14	790
Median	tr(0.6)	14	
Maximum	6.3	170	960
Minimum	tr(0.6)	tr(1.3)	650

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(0.6)
	Yokohama City	2	Yokohama Port	Blue mussel	6.3
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(0.6)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	6.8
		2		Chum salmon	1.7
	Iwate Pref.	3	Yamada Bay	Greenling	5.9
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	14
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	7.6
	Tokyo Met.	6	Tokyo Bay	Sea bass	27
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	34
	Nagoya City	8	Nagoya Port	Striped mullet	6.2
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	41
	Osaka Pref.	10	Osaka Bay	Sea bass	60
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	170
	Tottori Pref.	12	Nakaumi	Sea bass	8.9
	Hiroshima City	13	Hiroshima Bay	Sea bass	30
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	55
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	2.4
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	24
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	15
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(1.3)
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	650
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	960
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	69,000
		value		Egg of Great Cormorant (Egg white)	51

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

[1-6-3] 2,3',4,4',5,5'-Hexachlorobiphenyl (#167) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0)
Detection Frequency (sample): 23/23 (Missing value: 0)

h	
	Aggregated value
Geometric mean	30
Median	27
Maximum	1,800
Minimum	tr(1.1)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	3.2	28	1,600
Median	1.6	28	
Maximum	19	460	1,800
Minimum	tr(1.1)	2.8	1,400

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	1.6
	Yokohama City	2	Yokohama Port	Blue mussel	19
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(1.1)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	9.1
		2		Chum salmon	3.8
	Iwate Pref.	3	Yamada Bay	Greenling	11
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	27
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	15
	Tokyo Met.	6	Tokyo Bay	Sea bass	64
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	66
	Nagoya City	8	Nagoya Port	Striped mullet	12
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	80
	Osaka Pref.	10	Osaka Bay	Sea bass	130
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	460
	Tottori Pref.	12	Nakaumi	Sea bass	25
	Hiroshima City	13	Hiroshima Bay	Sea bass	55
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	130
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	3.5
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	48
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	29
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	2.8
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	1,400
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	1,800
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	150,000
		value		Egg of Great Cormorant (Egg white)	120

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

### [1-6-4] 3,3',4,4',5,5'-Hexachlorobiphenyl (#169) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 16/23 (Missing value: 0) Detection Frequency (sample): 16/23 (Missing value: 0)

	Aggregated value
Geometric mean	tr(1.3)
Median	tr(1.1)
Maximum	39
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	14/18	2/2
Detection Frequency (sample)	0/3	14/18	2/2
Geometric mean	nd	tr(1.2)	36
Median	nd	tr(1.2)	
Maximum	nd	9.6	39
Minimum	nd	nd	33

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(0.8)
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	1.7
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(1.1)
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	tr(1.0)
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(1.3)
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	tr(0.6)
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	2.7
	Osaka Pref.	10	Osaka Bay	Sea bass	4.3
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	9.6
	Tottori Pref.	12	Nakaumi	Sea bass	tr(0.7)
	Hiroshima City	13	Hiroshima Bay	Sea bass	2.7
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	8.8
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	2.4
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(1.2)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	33
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	39
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	3,000
		value		Egg of Great Cormorant (Egg white)	2.0

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-7] Heptachlorobiphenyls/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	1,100
Median	1,000
Maximum	27,000
Minimum	27

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	96	1,200	26,000
Median	68	1,000	
Maximum	480	19,000	27,000
Minimum	27	95	25,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	68
	Yokohama City	2	Yokohama Port	Blue mussel	480
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	27
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	340
		2		Chum salmon	130
	Iwate Pref.	3	Yamada Bay	Greenling	680
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	1,000
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	420
	Tokyo Met.	6	Tokyo Bay	Sea bass	1,700
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	1,600
	Nagoya City	8	Nagoya Port	Striped mullet	600
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	1,600
	Osaka Pref.	10	Osaka Bay	Sea bass	5,300
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	19,000
	Tottori Pref.	12	Nakaumi	Sea bass	890
	Hiroshima City	13	Hiroshima Bay	Sea bass	5,100
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	11,000
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	95
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	4,700
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	1,100
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	190
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	25,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	27,000
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	3,300,000
		value		Egg of Great Cormorant (Egg white)	2,500

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

## $[1\text{-}7\text{-}1]\ 2,2',3,3',4,4',5\text{-}Heptachlorobiphenyl}\ (\#170)\ /wildlife\ (pg/g\text{-}wet)$

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	84
Median	79
Maximum	4,000
Minimum	1.1

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	2.4	100	3,600
Median	1.4	86	
Maximum	9.0	1,600	4,000
Minimum	1.1	9.5	3,300

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	1.4
	Yokohama City	2	Yokohama Port	Blue mussel	9.0
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	1.1
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	40
		2		Chum salmon	9.5
	Iwate Pref.	3	Yamada Bay	Greenling	65
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	79
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	36
	Tokyo Met.	6	Tokyo Bay	Sea bass	150
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	150
	Nagoya City	8	Nagoya Port	Striped mullet	60
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	210
	Osaka Pref.	10	Osaka Bay	Sea bass	460
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	1,600
	Tottori Pref.	12	Nakaumi	Sea bass	59
	Hiroshima City	13	Hiroshima Bay	Sea bass	340
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	920
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	11
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	290
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	92
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	14
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	4,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	3,300
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	500,000
		value		Egg of Great Cormorant (Egg white)	380

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

 $\hbox{[1-7-2] 2,2',3,4,4',5,5'-Heptachlorobiphenyl (\#180)/wildlife (pg/g-wet)}\\$ 

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	270
Median	270
Maximum	9,600
Minimum	3.3

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	11	310	9,100
Median	7.7	280	
Maximum	57	4,900	9,600
Minimum	3.3	28	8,700

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	7.7
	Yokohama City	2	Yokohama Port	Blue mussel	57
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	3.3
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	110
		2		Chum salmon	30
	Iwate Pref.	3	Yamada Bay	Greenling	170
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	280
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	110
	Tokyo Met.	6	Tokyo Bay	Sea bass	490
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	440
	Nagoya City	8	Nagoya Port	Striped mullet	180
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	410
	Osaka Pref.	10	Osaka Bay	Sea bass	1,500
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	4,900
	Tottori Pref.	12	Nakaumi	Sea bass	180
	Hiroshima City	13	Hiroshima Bay	Sea bass	1,200
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	2,800
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	28
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	980
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	270
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	65
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	8,700
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	9,600
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,200,000
		value		Egg of Great Cormorant (Egg white)	900

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

[1-7-3] 2,3,3',4,4',5,5'-Heptachlorobiphenyl (#189) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 21/23 (Missing value: 0) Detection Frequency (sample): 21/23 (Missing value: 0)

	Aggregated value
Geometric mean	4.9
Median	4.7
Maximum	240
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	17/18	2/2
Detection Frequency (sample)	2/3	17/18	2/2
Geometric mean	tr(0.4)	4.8	220
Median	tr(0.3)	5.3	
Maximum	1.8	64	240
Minimum	nd	nd	210

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	1.8
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(0.3)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	2.5
		2		Chum salmon	tr(0.4)
	Iwate Pref.	3	Yamada Bay	Greenling	3.1
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	4.7
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	3.1
	Tokyo Met.	6	Tokyo Bay	Sea bass	7.6
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	8.5
	Nagoya City	8	Nagoya Port	Striped mullet	2.6
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	12
	Osaka Pref.	10	Osaka Bay	Sea bass	22
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	64
	Tottori Pref.	12	Nakaumi	Sea bass	3.3
	Hiroshima City	13	Hiroshima Bay	Sea bass	15
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	34
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	16
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	5.9
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	0.7
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	240
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	210
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	27,000
		value		Egg of Great Cormorant (Egg white)	17

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1-8] Octachlorobiphenyls/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	140
Median	150
Maximum	4,100
Minimum	1.3

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	4.6	180	3,700
Median	3.6	160	
Maximum	21	2,300	4,100
Minimum	1.3	13	3,300

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	3.6
	Yokohama City	2	Yokohama Port	Blue mussel	21
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	1.3
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	58
		2		Chum salmon	13
	Iwate Pref.	3	Yamada Bay	Greenling	120
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	150
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	53
	Tokyo Met.	6	Tokyo Bay	Sea bass	200
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	170
	Nagoya City	8	Nagoya Port	Striped mullet	120
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	190
	Osaka Pref.	10	Osaka Bay	Sea bass	720
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	2,300
	Tottori Pref.	12	Nakaumi	Sea bass	120
	Hiroshima City	13	Hiroshima Bay	Sea bass	790
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	2,300
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	15
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	690
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	170
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	80
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	4,100
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	3,300
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	510,000
		value		Egg of Great Cormorant (Egg white)	320

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

### [1-9] Nonachlorobiphenyls/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 20/23 (Missing value: 0) Detection Frequency (sample): 20/23 (Missing value: 0)

	Aggregated value
Geometric mean	11
Median	16
Maximum	500
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	18/18	2/2
Detection Frequency (sample)	0/3	18/18	2/2
Geometric mean	nd	16	420
Median	nd	16	
Maximum	nd	140	500
Minimum	nd	1.3	360

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	8.2
		2		Chum salmon	1.3
	Iwate Pref.	3	Yamada Bay	Greenling	10
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	19
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	10
	Tokyo Met.	6	Tokyo Bay	Sea bass	22
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	2.9
	Nagoya City	8	Nagoya Port	Striped mullet	12
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	34
	Osaka Pref.	10	Osaka Bay	Sea bass	46
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	140
	Tottori Pref.	12	Nakaumi	Sea bass	8.1
	Hiroshima City	13	Hiroshima Bay	Sea bass	38
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	140
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	2.2
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	35
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	17
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	16
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	500
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	360
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	29,000
		value		Egg of Great Cormorant (Egg white)	8.7

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) nd: Not detected

### [1-10] Decachlorobiphenyl/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 19/23 (Missing value: 0) Detection Frequency (sample): 19/23 (Missing value: 0)

	Aggregated value
Geometric mean	5.4
Median	7.6
Maximum	190
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	17/18	2/2
Detection Frequency (sample)	0/3	17/18	2/2
Geometric mean	nd	5.9	160
Median	nd	7.8	
Maximum	nd	31	190
Minimum	nd	nd	140

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	5.2
		2		Chum salmon	tr(1.1)
	Iwate Pref.	3	Yamada Bay	Greenling	3.1
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	14
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	7.6
	Tokyo Met.	6	Tokyo Bay	Sea bass	17
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	4.2
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	14
	Osaka Pref.	10	Osaka Bay	Sea bass	9.6
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	28
	Tottori Pref.	12	Nakaumi	Sea bass	4.3
	Hiroshima City	13	Hiroshima Bay	Sea bass	11
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	31
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(1.2)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	14
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	8.1
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	2.0
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	140
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	190
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	13,000
		value		Egg of Great Cormorant (Egg white)	5.2

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [2] HCB (Hexachlorobenzene) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	99
Median	76
Maximum	2,300
Minimum	7.6

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	8.4	110	2,000
Median	8.5	88	
Maximum	9.1	710	2,300
Minimum	7.6	16	1,800

	Local communities	No.	Monitored sites	Wildlife species	Measured value
	Iwate Pref.	1	Yamada Bay	Blue mussel	9.1
	Yokohama City	2	Yokohama Port	Blue mussel	7.6
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	8.5
Iwate Miyag Ibarak Tokyo Kawas Nagoy Shiga Osaka Hyogo Tottor Hirosh Kagaw Kochi Oita P	Hokkaido	1	Offshore of Kushiro	Rock greenling	410
		2		Chum salmon	610
	Iwate Pref.	3	Yamada Bay	Greenling	130
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	49
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	710
	Tokyo Met.	6	Tokyo Bay	Sea bass	100
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	130
	Nagoya City	8	Nagoya Port	Striped mullet	54
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	370
	Osaka Pref.	10	Osaka Bay	Sea bass	63
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	130
	Tottori Pref.	12	Nakaumi	Sea bass	27
	Hiroshima City	13	Hiroshima Bay	Sea bass	46
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	310
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	38
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	76
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	75
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	16
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	1,800
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	2,300
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	34,000
		value		Egg of Great Cormorant (Egg white)	87

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

### [11-1] $\alpha$ -HCH /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 22/23 (Missing value: 0) Detection Frequency (sample): 22/23 (Missing value: 0)

	Aggregated value
Geometric mean	9.8
Median	10
Maximum	82
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	17/18	2/2
Detection Frequency (sample)	3/3	17/18	2/2
Geometric mean	7.4	8.7	47
Median	10	6.8	
Maximum	16	82	63
Minimum	2.5	nd	35

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	2.5
	Yokohama City	2	Yokohama Port	Blue mussel	16
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	10
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	82
		2		Chum salmon	54
	Iwate Pref.	3	Yamada Bay	Greenling	23
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	4.4
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	59
	Tokyo Met.	6	Tokyo Bay	Sea bass	27
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	14
	Nagoya City	8	Nagoya Port	Striped mullet	36
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	5.6
	Osaka Pref.	10	Osaka Bay	Sea bass	7.9
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	5.5
	Tottori Pref.	12	Nakaumi	Sea bass	3.2
	Hiroshima City	13	Hiroshima Bay	Sea bass	3.6
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	25
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(0.7)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	4.0
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	5.4
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	63
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	35
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	940
		value		Egg of Great Cormorant (Egg white)	4.9

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

### [11-2] $\beta$ -HCH /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	41
Median	35
Maximum	1,300
Minimum	2.2

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	18	32	1,100
Median	17	38	
Maximum	35	230	1,300
Minimum	10	2.2	970

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	10
	Yokohama City	2	Yokohama Port	Blue mussel	35
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	17
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	100
		2		Chum salmon	94
	Iwate Pref.	3	Yamada Bay	Greenling	65
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	14
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	230
	Tokyo Met.	6	Tokyo Bay	Sea bass	34
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	28
	Nagoya City	8	Nagoya Port	Striped mullet	67
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	57
	Osaka Pref.	10	Osaka Bay	Sea bass	43
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	49
	Tottori Pref.	12	Nakaumi	Sea bass	10
	Hiroshima City	13	Hiroshima Bay	Sea bass	14
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	120
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	2.2
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	23
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	19
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	5.5
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	970
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	1,300
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	38,000
		value		Egg of Great Cormorant (Egg white)	330

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

### [11-3] $\gamma$ -HCH (synonym: Lindane) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 22/23 (Missing value: 0) Detection Frequency (sample): 22/23 (Missing value: 0)

	Aggregated value
Geometric mean	3.1
Median	3.3
Maximum	24
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	17/18	2/2
Detection Frequency (sample)	3/3	17/18	2/2
Geometric mean	3.5	3.0	3.4
Median	5.1	2.8	
Maximum	8.4	24	6.6
Minimum	tr(1.0)	nd	1.8

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(1.0)
	Yokohama City	2	Yokohama Port	Blue mussel	8.4
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	5.1
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	24
		2		Chum salmon	18
	Iwate Pref.	3	Yamada Bay	Greenling	7.8
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	1.6
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	17
	Tokyo Met.	6	Tokyo Bay	Sea bass	7.3
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	5.8
	Nagoya City	8	Nagoya Port	Striped mullet	8.7
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	1.9
	Osaka Pref.	10	Osaka Bay	Sea bass	3.3
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	2.2
	Tottori Pref.	12	Nakaumi	Sea bass	1.2
	Hiroshima City	13	Hiroshima Bay	Sea bass	1.4
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	7.7
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(0.4)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	1.3
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(0.8)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	6.6
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	1.8
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	240
		value		Egg of Great Cormorant (Egg white)	tr(0.9)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [11-4] $\delta$ -HCH /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 17/23 (Missing value: 0)
Detection Frequency (sample): 17/23 (Missing value: 0)

	Aggregated value
Geometric mean	1.0
Median	1.2
Maximum	5.5
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	13/18	2/2
Detection Frequency (sample)	2/3	13/18	2/2
Geometric mean	tr(0.7)	1.0	1.6
Median	tr(0.6)	1.2	
Maximum	3.0	5.5	2.1
Minimum	nd	nd	1.2

Local communities	No.	Monitored sites	Wildlife species	Measured value
Iwate Pref.	1	Yamada Bay	Blue mussel	nd
Yokohama City	2	Yokohama Port	Blue mussel	3.0
Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(0.6)
Hokkaido	1	Offshore of Kushiro	Rock greenling	1.7
	2		Chum salmon	1.8
Iwate Pref.	3	Yamada Bay	Greenling	tr(0.7)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(0.5)
Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	1.9
Tokyo Met.	6	Tokyo Bay	Sea bass	5.1
Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	2.4
Nagoya City	8	Nagoya Port	Striped mullet	5.5
Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	3.7
Osaka Pref.	10	Osaka Bay	Sea bass	1.0
Hyogo Pref.	11	Offshore of Himeji	Sea bass	1.3
Tottori Pref.	12	Nakaumi	Sea bass	nd
Hiroshima City	13	Hiroshima Bay	Sea bass	nd
Kagawa Pref.	14	Takamatsu Port	Striped mullet	2.3
Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	nd
Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(0.9)
Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	1.2
Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	2.1
Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	100
	value		Egg of Great Cormorant (Egg white)	1.4
	Iwate Pref. Yokohama City Ishikawa Pref. Hokkaido  Iwate Pref. Miyagi Pref. Ibaraki Pref. Tokyo Met. Kawasaki City Nagoya City Shiga Pref. Osaka Pref. Hyogo Pref. Tottori Pref. Hiroshima City Kagawa Pref. Kachi Pref. Oita Pref. Okinawa Pref. Shiga Pref. Tottori Pref. Hagoshima Pref. Cokinawa Pref. Shiga Pref. Tottori Pref. Hyogo Pref. Tottori Pref.	Iwate Pref.         1           Yokohama City         2           Ishikawa Pref.         3           Hokkaido         1           2         Iwate Pref.         3           Miyagi Pref.         4           Ibaraki Pref.         5           Tokyo Met.         6           Kawasaki City         7           Nagoya City         8           Shiga Pref.         9           Osaka Pref.         10           Hyogo Pref.         11           Tottori Pref.         12           Hiroshima City         13           Kagawa Pref.         14           Kochi Pref.         15           Oita Pref.         16           Kagoshima Pref.         17           Okinawa Pref.         18           Shiga Pref.         1           Tottori Pref.         2           Hyogo Pref.         Reference value	Iwate Pref. 1 Yamada Bay Yokohama City 2 Yokohama Port Ishikawa Pref. 3 Coast of Noto Peninsula Hokkaido 1 Offshore of Kushiro 2 Iwate Pref. 3 Yamada Bay Miyagi Pref. 4 Sendai Bay (Matsushima Bay) Ibaraki Pref. 5 Offshore of Joban Tokyo Met. 6 Tokyo Bay Kawasaki City 7 Offshore of Ogishima Island, Port of Nagoya City 8 Nagoya Port Shiga Pref. 9 Lake Biwa, Riv. Ado Osaka Pref. 10 Osaka Bay Hyogo Pref. 11 Offshore of Himeji Tottori Pref. 12 Nakaumi Hiroshima City 13 Hiroshima Bay Kagawa Pref. 14 Takamatsu Port Kochi Pref. 15 Mouth of Riv. Shimanto (Shimanto City) Oita Pref. 16 Mouth of Riv. Oita (Oita City) Kagoshima Pref. 17 West Coast of Satsuma Peninsula Okinawa Pref. 18 Nakagusuku Bay Shiga Pref. 1 Tikubushima Island, Lake Biwa Tottori Pref. 2 Riv.Tenjin (Kurayoshi City) Hyogo Pref. Reference value	Iwate Pref.       1       Yamada Bay       Blue mussel         Yokohama City       2       Yokohama Port       Blue mussel         Ishikawa Pref.       3       Coast of Noto Peninsula       Blue mussel         Hokkaido       1       Offshore of Kushiro       Rock greenling         Iwate Pref.       3       Yamada Bay       Greenling         Miyagi Pref.       4       Sendai Bay (Matsushima Bay)       Greenling         Ibaraki Pref.       5       Offshore of Joban       Chub mackerel         Tokyo Met.       6       Tokyo Bay       Sea bass         Kawasaki City       7       Offshore of Ogishima Island, Port of       Sea bass         Nagoya City       8       Nagoya Port       Striped mullet         Shiga Pref.       9       Lake Biwa, Riv. Ado       Dace         Osaka Pref.       10       Osaka Bay       Sea bass         Hyogo Pref.       11       Offshore of Himeji       Sea bass         Tottori Pref.       12       Nakaumi       Sea bass         Kagawa Pref.       14       Takamatsu Port       Striped mullet         Kochi Pref.       15       Mouth of Riv. Shimanto (Shimanto City)       Sea bass         Oita Pref.       16 <td< td=""></td<>

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [14] Polybromodiphenyl ethers(Br4~Br10) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 18/23 (Missing value: 0) Detection Frequency (sample): 18/23 (Missing value: 0)

	Aggregated value
Geometric mean	86
Median	110
Maximum	1,300
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	15/18	2/2
Detection Frequency (sample)	1/3	15/18	2/2
Geometric mean	tr(26)	79	1,000
Median	nd	100	
Maximum	140	430	1,300
Minimum	nd	nd	820

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	140
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(49)
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	tr(35)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	71
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	160
	Tokyo Met.	6	Tokyo Bay	Sea bass	97
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	160
	Nagoya City	8	Nagoya Port	Striped mullet	tr(51)
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	360
	Osaka Pref.	10	Osaka Bay	Sea bass	200
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	430
	Tottori Pref.	12	Nakaumi	Sea bass	tr(39)
	Hiroshima City	13	Hiroshima Bay	Sea bass	140
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	160
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	220
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	110
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	820
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	1,300
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	49,000
		value		Egg of Great Cormorant (Egg white)	tr(33)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

<sup>(</sup>Note 5) \*: Indicates the sum value of the Quantification [Detection] limits of each congeners.

#### [14-1] Tetrabromodiphenyl ethers /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	40
Median	44
Maximum	250
Minimum	tr(6)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	16	38	210
Median	tr(7)	44	
Maximum	94	230	250
Minimum	tr(6)	tr(6)	180

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(6)
	Yokohama City	2	Yokohama Port	Blue mussel	94
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(7)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(12)
		2		Chum salmon	tr(10)
	Iwate Pref.	3	Yamada Bay	Greenling	18
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	43
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	63
	Tokyo Met.	6	Tokyo Bay	Sea bass	42
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	110
	Nagoya City	8	Nagoya Port	Striped mullet	24
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	170
	Osaka Pref.	10	Osaka Bay	Sea bass	93
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	230
	Tottori Pref.	12	Nakaumi	Sea bass	17
	Hiroshima City	13	Hiroshima Bay	Sea bass	64
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	65
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(6)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	56
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	44
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	13
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	180
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	250
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	16,000
		value		Egg of Great Cormorant (Egg white)	19

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

### $[14\text{-}1\text{-}1]\ 2,2',4,4'\text{-}Tetra bromodiphenyl ether}\ (\#47)\ / wildlife\ (pg/g\text{-}wet)$

Monitored year: 2022

Detection Frequency (site): 20/23 (Missing value: 0) Detection Frequency (sample): 20/23 (Missing value: 0)

	Aggregated value
Geometric mean	32
Median	34
Maximum	210
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	17/18	2/2
Detection Frequency (sample)	1/3	17/18	2/2
Geometric mean	tr(10)	32	170
Median	nd	34	
Maximum	64	170	210
Minimum	nd	nd	130

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	64
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(12)
		2		Chum salmon	tr(10)
	Iwate Pref.	3	Yamada Bay	Greenling	tr(18)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	43
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	39
	Tokyo Met.	6	Tokyo Bay	Sea bass	34
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	86
	Nagoya City	8	Nagoya Port	Striped mullet	24
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	130
	Osaka Pref.	10	Osaka Bay	Sea bass	69
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	170
	Tottori Pref.	12	Nakaumi	Sea bass	tr(17)
	Hiroshima City	13	Hiroshima Bay	Sea bass	52
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	65
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	34
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	27
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(13)
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	130
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	210
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	16,000
		value		Egg of Great Cormorant (Egg white)	tr(19)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [14-2] Pentabromodiphenyl ethers /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 21/23 (Missing value: 0) Detection Frequency (sample): 21/23 (Missing value: 0)

	Aggregated value
Geometric mean	16
Median	21
Maximum	260
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	17/18	2/2
Detection Frequency (sample)	2/3	17/18	2/2
Geometric mean	4	15	230
Median	tr(2)	20	
Maximum	26	82	260
Minimum	nd	nd	200

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	26
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(2)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	16
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	7
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	9
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	44
	Tokyo Met.	6	Tokyo Bay	Sea bass	21
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	27
	Nagoya City	8	Nagoya Port	Striped mullet	9
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	82
	Osaka Pref.	10	Osaka Bay	Sea bass	35
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	78
	Tottori Pref.	12	Nakaumi	Sea bass	11
	Hiroshima City	13	Hiroshima Bay	Sea bass	19
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	25
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(3)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	44
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	32
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(2)
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	200
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	260
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	8,800
		value		Egg of Great Cormorant (Egg white)	5

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

 $[14\text{-}2\text{-}1]\ 2,2',4,4',5\text{-Pentabromodiphenyl ether }(\#99)\ / wildlife\ (pg/g\text{-wet})$ 

Monitored year: 2022

Detection Frequency (site): 15/23 (Missing value: 0) Detection Frequency (sample): 15/23 (Missing value: 0)

	Aggregated value
Geometric mean	tr(3)
Median	tr(2)
Maximum	22
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	11/18	2/2
Detection Frequency (sample)	2/3	11/18	2/2
Geometric mean	tr(3)	tr(2)	15
Median	tr(2)	tr(2)	
Maximum	17	8	22
Minimum	nd	nd	10

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	17
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(2)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(2)
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	tr(3)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	4
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	7
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(3)
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	8
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	6
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	7
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	tr(2)
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	5
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(2)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	10
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	22
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,700
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [14-3] Hexabromodiphenyl ethers /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 20/23 (Missing value: 0) Detection Frequency (sample): 20/23 (Missing value: 0)

	Aggregated value
Geometric mean	18
Median	21
Maximum	480
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	17/18	2/2
Detection Frequency (sample)	1/3	17/18	2/2
Geometric mean	tr(2)	20	340
Median	nd	24	
Maximum	5	96	480
Minimum	nd	nd	240

Local communities	No.	Monitored sites	Wildlife species	Measured value
Iwate Pref.	1	Yamada Bay	Blue mussel	nd
Yokohama City	2	Yokohama Port	Blue mussel	nd
Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	5
Hokkaido	1	Offshore of Kushiro	Rock greenling	21
	2		Chum salmon	tr(2)
Iwate Pref.	3	Yamada Bay	Greenling	10
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	18
Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	47
Tokyo Met.	6	Tokyo Bay	Sea bass	28
Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	21
Nagoya City	8	Nagoya Port	Striped mullet	12
Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	96
Osaka Pref.	10	Osaka Bay	Sea bass	45
Hyogo Pref.	11	Offshore of Himeji	Sea bass	91
Tottori Pref.	12	Nakaumi	Sea bass	9
Hiroshima City	13	Hiroshima Bay	Sea bass	42
Kagawa Pref.	14	Takamatsu Port	Striped mullet	56
Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(3)
Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	89
Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	31
Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	240
Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	480
Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	14,000
	value		Egg of Great Cormorant (Egg white)	7
	Iwate Pref. Yokohama City Ishikawa Pref. Hokkaido  Iwate Pref. Miyagi Pref. Ibaraki Pref. Tokyo Met. Kawasaki City Nagoya City Shiga Pref. Osaka Pref. Hyogo Pref. Tottori Pref. Hiroshima City Kagawa Pref. Kochi Pref. Oita Pref. Kagoshima Pref. Okinawa Pref. Shiga Pref. Tottori Pref.	Iwate Pref.         1           Yokohama City         2           Ishikawa Pref.         3           Hokkaido         1           2         Iwate Pref.         3           Miyagi Pref.         4           Ibaraki Pref.         5           Tokyo Met.         6           Kawasaki City         7           Nagoya City         8           Shiga Pref.         9           Osaka Pref.         10           Hyogo Pref.         11           Tottori Pref.         12           Hiroshima City         13           Kagawa Pref.         14           Kochi Pref.         15           Oita Pref.         16           Kagoshima Pref.         17           Okinawa Pref.         18           Shiga Pref.         1           Tottori Pref.         2           Hyogo Pref.         Reference value	Iwate Pref. 1 Yamada Bay Yokohama City 2 Yokohama Port Ishikawa Pref. 3 Coast of Noto Peninsula Hokkaido 1 Offshore of Kushiro 2 Iwate Pref. 3 Yamada Bay Miyagi Pref. 4 Sendai Bay (Matsushima Bay) Ibaraki Pref. 5 Offshore of Joban Tokyo Met. 6 Tokyo Bay Kawasaki City 7 Offshore of Ogishima Island, Port of Nagoya City 8 Nagoya Port Shiga Pref. 9 Lake Biwa, Riv. Ado Osaka Pref. 10 Osaka Bay Hyogo Pref. 11 Offshore of Himeji Tottori Pref. 12 Nakaumi Hiroshima City 13 Hiroshima Bay Kagawa Pref. 14 Takamatsu Port Kochi Pref. 15 Mouth of Riv. Shimanto (Shimanto City) Oita Pref. 16 Mouth of Riv. Oita (Oita City) Kagoshima Pref. 17 West Coast of Satsuma Peninsula Okinawa Pref. 18 Nakagusuku Bay Shiga Pref. 1 Tikubushima Island, Lake Biwa Tottori Pref. 2 Riv.Tenjin (Kurayoshi City) Hyogo Pref. Reference value	Iwate Pref.       1       Yamada Bay       Blue mussel         Yokohama City       2       Yokohama Port       Blue mussel         Ishikawa Pref.       3       Coast of Noto Peninsula       Blue mussel         Hokkaido       1       Offshore of Kushiro       Rock greenling         Iwate Pref.       3       Yamada Bay       Greenling         Miyagi Pref.       4       Sendai Bay (Matsushima Bay)       Greenling         Ibaraki Pref.       5       Offshore of Joban       Chub mackerel         Tokyo Met.       6       Tokyo Bay       Sea bass         Kawasaki City       7       Offshore of Ogishima Island, Port of       Sea bass         Nagoya City       8       Nagoya Port       Striped mullet         Shiga Pref.       9       Lake Biwa, Riv. Ado       Dace         Osaka Pref.       10       Osaka Bay       Sea bass         Hyogo Pref.       11       Offshore of Himeji       Sea bass         Tottori Pref.       12       Nakaumi       Sea bass         Kagawa Pref.       14       Takamatsu Port       Striped mullet         Kochi Pref.       15       Mouth of Riv. Shimanto (Shimanto City)       Sea bass         Oita Pref.       16 <td< td=""></td<>

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

[14-3-1] 2,2',4,4',5,5'-Hexabromodiphenyl ether (#153) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 12/23 (Missing value: 0) Detection Frequency (sample): 12/23 (Missing value: 0)

	Aggregated value
Geometric mean	tr(3)
Median	tr(2)
Maximum	91
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	10/18	2/2
Detection Frequency (sample)	0/3	10/18	2/2
Geometric mean	nd	tr(2)	86
Median	nd	tr(2)	
Maximum	nd	14	91
Minimum	nd	nd	81

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(2)
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	tr(2)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	tr(4)
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(4)
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	tr(3)
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	14
	Osaka Pref.	10	Osaka Bay	Sea bass	7
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	8
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	tr(4)
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	5
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	81
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	91
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	6,500
		value		Egg of Great Cormorant (Egg white)	tr(2)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

 $[14\text{-}3\text{-}2]\ 2,2',4,4',5,6'-Hexabromodiphenyl\ ether\ (\#154)\ /wildlife\ (pg/g-wet)$ 

Monitored year: 2022

Detection Frequency (site): 20/23 (Missing value: 0) Detection Frequency (sample): 20/23 (Missing value: 0)

	Aggregated value
Geometric mean	9
Median	10
Maximum	140
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	17/18	2/2
Detection Frequency (sample)	1/3	17/18	2/2
Geometric mean	nd	9	140
Median	nd	10	
Maximum	tr(2)	50	140
Minimum	nd	nd	140

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(2)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	8
		2		Chum salmon	tr(2)
	Iwate Pref.	3	Yamada Bay	Greenling	tr(4)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	7
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	24
	Tokyo Met.	6	Tokyo Bay	Sea bass	11
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	10
	Nagoya City	8	Nagoya Port	Striped mullet	tr(3)
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	50
	Osaka Pref.	10	Osaka Bay	Sea bass	14
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	40
	Tottori Pref.	12	Nakaumi	Sea bass	5
	Hiroshima City	13	Hiroshima Bay	Sea bass	13
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	12
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(3)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	26
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	18
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	140
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	140
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	3,300
		value		Egg of Great Cormorant (Egg white)	tr(2)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [14-4] Heptabromodiphenyl ethers /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 6/23 (Missing value: 0)
Detection Frequency (sample): 6/23 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	96
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	4/18	2/2
Detection Frequency (sample)	0/3	4/18	2/2
Geometric mean	nd	nd	69
Median	nd	nd	
Maximum	nd	tr(8)	96
Minimum	nd	nd	49

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	tr(8)
	Osaka Pref.	10	Osaka Bay	Sea bass	tr(4)
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	tr(5)
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	nd
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	tr(5)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	49
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	96
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	2,500
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

[14-4-1] 2,2',3,3',4,5',6-Heptabromodiphenyl ether (#175) /wildlife (pg/g-wet) and [14-4-2] 2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 1/23 (Missing value: 0)
Detection Frequency (sample): 1/23 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	13
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	0/18	1/2
Detection Frequency (sample)	0/3	0/18	1/2
Geometric mean	nd	nd	tr(5)
Median	nd	nd	
Maximum	nd	nd	13
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	nd
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	nd
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	13
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	530
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [14-5] Octabromodiphenyl ethers /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 16/23 (Missing value: 0)
Detection Frequency (sample): 16/23 (Missing value: 0)

	Aggregated value
Geometric mean	4
Median	3
Maximum	180
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	13/18	2/2
Detection Frequency (sample)	1/3	13/18	2/2
Geometric mean	nd	3	160
Median	nd	4	
Maximum	tr(1)	29	180
Minimum	nd	nd	150

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	tr(1)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(1)
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	3
	Tokyo Met.	6	Tokyo Bay	Sea bass	6
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	5
	Nagoya City	8	Nagoya Port	Striped mullet	6
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	5
	Osaka Pref.	10	Osaka Bay	Sea bass	21
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	29
	Tottori Pref.	12	Nakaumi	Sea bass	2
	Hiroshima City	13	Hiroshima Bay	Sea bass	15
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	12
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	29
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	3
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	150
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	180
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	7,000
		value		Egg of Great Cormorant (Egg white)	2

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [14-6] Nonabromodiphenyl ethers /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 1/23 (Missing value: 0)
Detection Frequency (sample): 1/23 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	10
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	0/18	1/2
Detection Frequency (sample)	0/3	0/18	1/2
Geometric mean	nd	nd	tr(4)
Median	nd	nd	
Maximum	nd	nd	10
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	nd
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	nd
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	10
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	140
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

[14-7] デカブロモジフェニルエーテル /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 3/23 (Missing value: 0)
Detection Frequency (sample): 3/23 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	15
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	1/18	1/2
Detection Frequency (sample)	1/3	1/18	1/2
Geometric mean	tr(5)	nd	tr(5)
Median	nd	nd	
Maximum	15	tr(7)	tr(9)
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	15
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	tr(7)
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	nd
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	nd
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	tr(9)
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	150
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [15] Perfluorooctane sulfonic acid (PFOS) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	310
Median	290
Maximum	100,000
Minimum	9

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	27	280	23,000
Median	13	360	
Maximum	160	7,200	100,000
Minimum	9	9	5,200

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	13
	Yokohama City	2	Yokohama Port	Blue mussel	160
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	9
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	58
		2		Chum salmon	9
	Iwate Pref.	3	Yamada Bay	Greenling	22
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	48
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	2,100
	Tokyo Met.	6	Tokyo Bay	Sea bass	1,100
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	1,200
	Nagoya City	8	Nagoya Port	Striped mullet	150
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	7,200
	Osaka Pref.	10	Osaka Bay	Sea bass	740
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	480
	Tottori Pref.	12	Nakaumi	Sea bass	560
	Hiroshima City	13	Hiroshima Bay	Sea bass	240
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	290
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	420
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	1,400
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	230
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	46
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	100,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	5,200
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	270,000
		value		Egg of Great Cormorant (Egg white)	1,800

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

### [16] Perfluorooctanoic acid (PFOA) /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 22/23 (Missing value: 0) Detection Frequency (sample): 22/23 (Missing value: 0)

	Aggregated value
Geometric mean	17
Median	13
Maximum	2,600
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	17/18	2/2
Detection Frequency (sample)	3/3	17/18	2/2
Geometric mean	16	11	1,100
Median	22	13	
Maximum	35	47	2,600
Minimum	tr(5)	nd	470

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(5)
	Yokohama City	2	Yokohama Port	Blue mussel	22
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	35
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	15
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	38
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	47
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	18
	Tokyo Met.	6	Tokyo Bay	Sea bass	13
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	17
	Nagoya City	8	Nagoya Port	Striped mullet	tr(4)
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	15
	Osaka Pref.	10	Osaka Bay	Sea bass	13
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	9
	Tottori Pref.	12	Nakaumi	Sea bass	tr(5)
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(5)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	26
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	13
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	10
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	9
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	9
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	2,600
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	470
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	4,800
		value		Egg of Great Cormorant (Egg white)	39

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [17] Pentachlorobenzene/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0)

	Aggregated value
Geometric mean	19
Median	20
Maximum	330
Minimum	1.9

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	4.4	18	290
Median	4.7	21	
Maximum	9.8	78	330
Minimum	1.9	3.6	260

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	1.9
	Yokohama City	2	Yokohama Port	Blue mussel	9.8
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	4.7
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	34
		2		Chum salmon	46
	Iwate Pref.	3	Yamada Bay	Greenling	22
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	5.9
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	78
	Tokyo Met.	6	Tokyo Bay	Sea bass	50
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	39
	Nagoya City	8	Nagoya Port	Striped mullet	24
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	39
	Osaka Pref.	10	Osaka Bay	Sea bass	13
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	20
	Tottori Pref.	12	Nakaumi	Sea bass	7.1
	Hiroshima City	13	Hiroshima Bay	Sea bass	9.7
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	66
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	3.6
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	13
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	8.8
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	3.6
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	260
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	330
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	6,800
		value		Egg of Great Cormorant (Egg white)	21

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.

#### [19] 1,2,5,6,9,10-Hexabromocyclododecanes /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 13/23 (Missing value: 0) Detection Frequency (sample): 13/23 (Missing value: 0)

h	T
	Aggregated value
Geometric mean	tr(120)
Median	tr(110)
Maximum	750
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	9/18	2/2
Detection Frequency (sample)	2/3	9/18	2/2
Geometric mean	tr(140)	tr(100)	590
Median	tr(190)	nd	
Maximum	270	480	750
Minimum	nd	nd	460

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	tr(190)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	270
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	tr(200)
	Tokyo Met.	6	Tokyo Bay	Sea bass	320
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	tr(170)
	Nagoya City	8	Nagoya Port	Striped mullet	tr(110)
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	450
	Osaka Pref.	10	Osaka Bay	Sea bass	tr(180)
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	480
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(110)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	tr(170)
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	460
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	750
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	22,000
		value		Egg of Great Cormorant (Egg white)	tr(110)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd : Not detected

<sup>(</sup>Note 5) \*: Indicates the sum value of the Quantification [Detection] limits of each target chemicals.

[19-1]  $\alpha$  -1,2,5,6,9,10-Hexabromocyclododecane /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 19/23 (Missing value: 0) Detection Frequency (sample): 19/23 (Missing value: 0)

	Aggregated value
Geometric mean	90
Median	90
Maximum	750
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	14/18	2/2
Detection Frequency (sample)	3/3	14/18	2/2
Geometric mean	150	70	590
Median	160	80	
Maximum	250	450	750
Minimum	80	nd	460

Local communities	No.	Monitored sites	Wildlife species	Measured value
Iwate Pref.	1	Yamada Bay	Blue mussel	80
Yokohama City	2	Yokohama Port	Blue mussel	160
Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	250
Hokkaido	1	Offshore of Kushiro	Rock greenling	80
	2		Chum salmon	40
Iwate Pref.	3	Yamada Bay	Greenling	40
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	200
Tokyo Met.	6	Tokyo Bay	Sea bass	300
Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	150
Nagoya City	8	Nagoya Port	Striped mullet	80
Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	430
Osaka Pref.	10	Osaka Bay	Sea bass	150
Hyogo Pref.	11	Offshore of Himeji	Sea bass	450
Tottori Pref.	12	Nakaumi	Sea bass	tr(30)
Hiroshima City	13	Hiroshima Bay	Sea bass	90
Kagawa Pref.	14	Takamatsu Port	Striped mullet	150
Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	60
Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	460
Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	750
Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	22,000
	value		Egg of Great Cormorant (Egg white)	110
	Iwate Pref. Yokohama City Ishikawa Pref. Hokkaido  Iwate Pref. Miyagi Pref. Ibaraki Pref. Tokyo Met. Kawasaki City Nagoya City Shiga Pref. Osaka Pref. Hyogo Pref. Tottori Pref. Hiroshima City Kagawa Pref. Kochi Pref. Oita Pref. Okinawa Pref. Shiga Pref. Tottori Pref. Hyogo Pref. Tottori Pref. Hyogo Pref. Kagoshima Pref. Okinawa Pref. Shiga Pref. Tottori Pref. Hyogo Pref.	Iwate Pref.         1           Yokohama City         2           Ishikawa Pref.         3           Hokkaido         1           2         Iwate Pref.         3           Miyagi Pref.         4           Ibaraki Pref.         5           Tokyo Met.         6           Kawasaki City         7           Nagoya City         8           Shiga Pref.         9           Osaka Pref.         10           Hyogo Pref.         11           Tottori Pref.         12           Hiroshima City         13           Kagawa Pref.         14           Kochi Pref.         15           Oita Pref.         16           Kagoshima Pref.         17           Okinawa Pref.         18           Shiga Pref.         1           Tottori Pref.         2           Hyogo Pref.         Reference value	Iwate Pref.       1       Yamada Bay         Yokohama City       2       Yokohama Port         Ishikawa Pref.       3       Coast of Noto Peninsula         Hokkaido       1       Offshore of Kushiro         Iwate Pref.       3       Yamada Bay         Miyagi Pref.       4       Sendai Bay (Matsushima Bay)         Ibaraki Pref.       5       Offshore of Joban         Tokyo Met.       6       Tokyo Bay         Kawasaki City       7       Offshore of Ogishima Island, Port of         Nagoya City       8       Nagoya Port         Shiga Pref.       9       Lake Biwa, Riv. Ado         Osaka Pref.       10       Osaka Bay         Hyogo Pref.       11       Offshore of Himeji         Tottori Pref.       12       Nakaumi         Hiroshima City       13       Hiroshima Bay         Kagawa Pref.       14       Takamatsu Port         Kochi Pref.       15       Mouth of Riv. Shimanto (Shimanto City)         Oita Pref.       16       Mouth of Riv. Oita (Oita City)         Kagoshima Pref.       17       West Coast of Satsuma Peninsula         Okinawa Pref.       18       Nakagusuku Bay         Shiga Pref.       1       <	Iwate Pref.       1       Yamada Bay       Blue mussel         Yokohama City       2       Yokohama Port       Blue mussel         Ishikawa Pref.       3       Coast of Noto Peninsula       Blue mussel         Hokkaido       1       Offshore of Kushiro       Rock greenling         Iwate Pref.       3       Yamada Bay       Greenling         Miyagi Pref.       4       Sendai Bay (Matsushima Bay)       Greenling         Ibaraki Pref.       5       Offshore of Joban       Chub mackerel         Tokyo Met.       6       Tokyo Bay       Sea bass         Kawasaki City       7       Offshore of Ogishima Island, Port of       Sea bass         Nagoya City       8       Nagoya Port       Striped mullet         Shiga Pref.       9       Lake Biwa, Riv. Ado       Dace         Osaka Pref.       10       Osaka Bay       Sea bass         Hyogo Pref.       11       Offshore of Himeji       Sea bass         Tottori Pref.       12       Nakaumi       Sea bass         Kagawa Pref.       14       Takamatsu Port       Striped mullet         Kochi Pref.       15       Mouth of Riv. Shimanto (Shimanto City)       Sea bass         Oita Pref.       16 <td< td=""></td<>

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

[19-2]  $\beta$  -1,2,5,6,9,10-Hexabromocyclododecane /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 0/23 (Missing value: 0)
Detection Frequency (sample): 0/23 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	0/18	0/2
Detection Frequency (sample)	0/3	0/18	0/2
Geometric mean	nd	nd	nd
Median	nd	nd	
Maximum	nd	nd	nd
Minimum	nd	nd	nd

Local communities	No.	Monitored sites	Wildlife species	Measured value
Iwate Pref.	1	Yamada Bay	Blue mussel	nd
Yokohama City	2	Yokohama Port	Blue mussel	nd
Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	2		Chum salmon	nd
Iwate Pref.	3	Yamada Bay	Greenling	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
Tokyo Met.	6	Tokyo Bay	Sea bass	nd
Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	nd
Nagoya City	8	Nagoya Port	Striped mullet	nd
Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
Osaka Pref.	10	Osaka Bay	Sea bass	nd
Hyogo Pref.	11	Offshore of Himeji	Sea bass	nd
Tottori Pref.	12	Nakaumi	Sea bass	nd
Hiroshima City	13	Hiroshima Bay	Sea bass	nd
Kagawa Pref.	14	Takamatsu Port	Striped mullet	nd
Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	nd
Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
	value		Egg of Great Cormorant (Egg white)	nd
	Iwate Pref. Yokohama City Ishikawa Pref. Hokkaido  Iwate Pref. Miyagi Pref. Ibaraki Pref. Tokyo Met. Kawasaki City Nagoya City Shiga Pref. Osaka Pref. Hyogo Pref. Tottori Pref. Hiroshima City Kagawa Pref. Kachi Pref. Oita Pref. Okinawa Pref. Shiga Pref. Tottori Pref. Hagoshima Pref. Cokinawa Pref. Shiga Pref. Tottori Pref. Hyogo Pref. Tottori Pref.	Iwate Pref.         1           Yokohama City         2           Ishikawa Pref.         3           Hokkaido         1           2         Iwate Pref.         3           Miyagi Pref.         4           Ibaraki Pref.         5           Tokyo Met.         6           Kawasaki City         7           Nagoya City         8           Shiga Pref.         9           Osaka Pref.         10           Hyogo Pref.         11           Tottori Pref.         12           Hiroshima City         13           Kagawa Pref.         14           Kochi Pref.         15           Oita Pref.         16           Kagoshima Pref.         17           Okinawa Pref.         18           Shiga Pref.         1           Tottori Pref.         2           Hyogo Pref.         Reference value	Iwate Pref. 1 Yamada Bay Yokohama City 2 Yokohama Port Ishikawa Pref. 3 Coast of Noto Peninsula Hokkaido 1 Offshore of Kushiro 2 Iwate Pref. 3 Yamada Bay Miyagi Pref. 4 Sendai Bay (Matsushima Bay) Ibaraki Pref. 5 Offshore of Joban Tokyo Met. 6 Tokyo Bay Kawasaki City 7 Offshore of Ogishima Island, Port of Nagoya City 8 Nagoya Port Shiga Pref. 9 Lake Biwa, Riv. Ado Osaka Pref. 10 Osaka Bay Hyogo Pref. 11 Offshore of Himeji Tottori Pref. 12 Nakaumi Hiroshima City 13 Hiroshima Bay Kagawa Pref. 14 Takamatsu Port Kochi Pref. 15 Mouth of Riv. Shimanto (Shimanto City) Oita Pref. 16 Mouth of Riv. Oita (Oita City) Kagoshima Pref. 17 West Coast of Satsuma Peninsula Okinawa Pref. 18 Nakagusuku Bay Shiga Pref. 1 Tikubushima Island, Lake Biwa Tottori Pref. 2 Riv.Tenjin (Kurayoshi City) Hyogo Pref. Reference value	Iwate Pref.       1       Yamada Bay       Blue mussel         Yokohama City       2       Yokohama Port       Blue mussel         Ishikawa Pref.       3       Coast of Noto Peninsula       Blue mussel         Hokkaido       1       Offshore of Kushiro       Rock greenling         Iwate Pref.       3       Yamada Bay       Greenling         Miyagi Pref.       4       Sendai Bay (Matsushima Bay)       Greenling         Ibaraki Pref.       5       Offshore of Joban       Chub mackerel         Tokyo Met.       6       Tokyo Bay       Sea bass         Kawasaki City       7       Offshore of Ogishima Island, Port of       Sea bass         Nagoya City       8       Nagoya Port       Striped mullet         Shiga Pref.       9       Lake Biwa, Riv. Ado       Dace         Osaka Pref.       10       Osaka Bay       Sea bass         Hyogo Pref.       11       Offshore of Himeji       Sea bass         Tottori Pref.       12       Nakaumi       Sea bass         Kagawa Pref.       14       Takamatsu Port       Striped mullet         Koch Pref.       15       Mouth of Riv. Shimanto (Shimanto City)       Sea bass         Oita Pref.       16

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) nd: Not detected

[19-3]  $\gamma$  -1,2,5,6,9,10-Hexabromocyclododecane /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 10/23 (Missing value: 0) Detection Frequency (sample): 10/23 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(30)
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	8/18	0/2
Detection Frequency (sample)	2/3	8/18	0/2
Geometric mean	tr(20)	nd	nd
Median	tr(20)	nd	
Maximum	tr(30)	tr(30)	nd
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	tr(30)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(20)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(20)
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	tr(20)
	Nagoya City	8	Nagoya Port	Striped mullet	tr(30)
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	tr(20)
	Osaka Pref.	10	Osaka Bay	Sea bass	tr(30)
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	tr(30)
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(20)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	tr(20)
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	50
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

[19-4]  $\delta$  -1,2,5,6,9,10-Hexabromocyclododecane /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 0/23 (Missing value: 0)
Detection Frequency (sample): 0/23 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	0/18	0/2
Detection Frequency (sample)	0/3	0/18	0/2
Geometric mean	nd	nd	nd
Median	nd	nd	
Maximum	nd	nd	nd
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	nd
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	nd
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) nd: Not detected

[19-5]  $\varepsilon$  -1,2,5,6,9,10-Hexabromocyclododecane /wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 0/23 (Missing value: 0)
Detection Frequency (sample): 0/23 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	0/18	0/2
Detection Frequency (sample)	0/3	0/18	0/2
Geometric mean	nd	nd	nd
Median	nd	nd	
Maximum	nd	nd	nd
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	nd
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	nd
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) nd: Not detected

#### [21] Hexachlorobuta-1,3-diene/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 9/23 (Missing value: 0)
Detection Frequency (sample): 9/23 (Missing value: 0)

	Aggregated value
Geometric mean	tr(4)
Median	nd
Maximum	290
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	9/18	0/2
Detection Frequency (sample)	0/3	9/18	0/2
Geometric mean	nd	tr(6)	nd
Median	nd	tr(4)	
Maximum	nd	290	nd
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	25
		2		Chum salmon	29
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	tr(8)
	Tokyo Met.	6	Tokyo Bay	Sea bass	13
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	tr(6)
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	tr(6)
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	tr(6)
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	290
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	10
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	55
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [23] Short-chain chlorinated paraffins/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 6/23 (Missing value: 0)
Detection Frequency (sample): 6/23 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(2,700)
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	4/18	1/2
Detection Frequency (sample)	1/3	4/18	1/2
Geometric mean	nd	nd	nd
Median	nd	nd	
Maximum	tr(2,700)	tr(2,600)	tr(1,600)
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	tr(2,700)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	tr(2,600)
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	tr(1,500)
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	nd
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(1,300)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(1,600)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	tr(1,600)
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	8,600
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

<sup>(</sup>Note 5) \*: Indicates the sum value of the Quantification [Detection] limits of each substance with the same number of carbons in the alkyl group.

#### [23-1] Chlorinated decanes/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 8/23 (Missing value: 0) Detection Frequency (sample): 8/23 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(400)
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	6/18	1/2
Detection Frequency (sample)	1/3	6/18	1/2
Geometric mean	nd	nd	nd
Median	nd	nd	
Maximum	tr(300)	tr(400)	tr(200)
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	tr(300)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	tr(400)
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	tr(200)
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(200)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	tr(200)
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(200)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(200)
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	tr(200)
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,200
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [23-2] Chlorinated undecanes/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 8/23 (Missing value: 0) Detection Frequency (sample): 8/23 (Missing value: 0) Detection limit: 300

Quantification limit: 900

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(700)
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	7/18	0/2
Detection Frequency (sample)	1/3	7/18	0/2
Geometric mean	nd	nd	nd
Median	nd	nd	
Maximum	tr(500)	tr(700)	nd
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	tr(500)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(400)
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	tr(700)
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	tr(300)
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	tr(300)
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(300)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(400)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(400)
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,900
		value		Egg of Great Cormorant (Egg white)	nd

(Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 4) nd: Not detected

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

#### [23-3] Chlorinated dodecanes/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 16/23 (Missing value: 0) Detection Frequency (sample): 16/23 (Missing value: 0)

	Aggregated value
Geometric mean	tr(300)
Median	tr(400)
Maximum	900
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	13/18	1/2
Detection Frequency (sample)	2/3	13/18	1/2
Geometric mean	tr(300)	tr(300)	tr(300)
Median	tr(300)	tr(400)	
Maximum	900	tr(800)	tr(500)
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(300)
	Yokohama City	2	Yokohama Port	Blue mussel	900
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(400)
		2		Chum salmon	tr(400)
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(400)
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	tr(800)
	Nagoya City	8	Nagoya Port	Striped mullet	tr(300)
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	tr(500)
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	12	Nakaumi	Sea bass	tr(400)
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(500)
. [	Kagawa Pref.	14	Takamatsu Port	Striped mullet	tr(400)
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(500)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	tr(300)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(500)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(400)
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	tr(500)
,	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	2,500
		value		Egg of Great Cormorant (Egg white)	tr(400)

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

#### [23-4] Chlorinated tridecanes/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 10/23 (Missing value: 0) Detection Frequency (sample): 10/23 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	1,000
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	7/18	1/2
Detection Frequency (sample)	2/3	7/18	1/2
Geometric mean	tr(500)	nd	tr(400)
Median	tr(500)	nd	-
Maximum	1,000	tr(700)	900
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(500)
	Yokohama City	2	Yokohama Port	Blue mussel	1,000
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	tr(500)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	tr(700)
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	tr(500)
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	12	Nakaumi	Sea bass	tr(400)
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	nd
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(500)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	tr(400)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(500)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	900
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	3,000
		value		Egg of Great Cormorant (Egg white)	nd

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [25] Perfluorohexane sulfonic acid (PFHxS)/wildlife (pg/g-wet)

Monitored year: 2022

Detection Frequency (site): 12/23 (Missing value: 0) Detection Frequency (sample): 12/23 (Missing value: 0)

	Aggregated value
Geometric mean	tr(5)
Median	tr(5)
Maximum	630
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	10/18	2/2
Detection Frequency (sample)	0/3	10/18	2/2
Geometric mean	nd	tr(4)	400
Median	nd	tr(6)	
Maximum	nd	20	630
Minimum	nd	nd	250

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2		Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	tr(6)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	12
	Ibaraki Pref.	5	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	15
	Kawasaki City	7	Offshore of Ogishima Island, Port of	Sea bass	20
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	nd
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	7
	Tottori Pref.	12	Nakaumi	Sea bass	tr(6)
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(5)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	nd
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Spanish mackerel	13
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	10
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	7
Birds	Shiga Pref.	1	Tikubushima Island, Lake Biwa	Great Cormorant	250
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	630
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	6,500
		value		Egg of Great Cormorant (Egg white)	62

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 4) nd: Not detected

### [1] Total Polychlorinated biphenyls (Total PCBs)/air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	78
Median	82
Maximum	190
Minimum	18

Local communities	No.	Monitored sites	Warm	Air sampler	
Local communities	INO.	Wolltored sites	Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	34	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$	19	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	45	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	37	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	53	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	97	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	140	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	37	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	98	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	160	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	88	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	140	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	68	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	120	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	73	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	86	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	130	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	70	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	170	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	170	HV

Local communities	No.	Monitored sites		season	Air sampler
Local communities	110.	Worntofed Sites	Sampling dates	Measured value	1
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	150	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	10/3~10/4	150	HV
•		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	62	HV
			10/25~10/26	Ì	
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	18	HV
			10/25~10/26		
			10/26~10/27		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	79	HV
		in any animal and a series (and summer only)	10/18~10/19		
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	120	MV
r amaguem r rei.	23	Environment (Yamaguchi City)	7/13 7/20	120	1V1 V
		Environment (1 amagaem city)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	130	MV
	20	Tragi Treath and Wenare Center (Tragi City)	7/13 7/20	130	1V1 V
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	68	HV
i okusiiiiia i ici.	21	Environmental Sciences Center (Tokushima City)	10/24 - 10/25 $10/25 \sim 10/26$	00	11 V
		Environmental Sciences Center (Tokusinina City)			
Vacarra Duaf	28	Kagawa Prefectural Research Institute for Environmental	$10/26 \sim 10/27$ $9/27 \sim 10/4$	190	MV
Kagawa Pref.	28	Sciences and Public Health (Takamatsu City)	9/2/~10/4	190	IVI V
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	42	HV
Ellinic I ICI.	23	(Uwajima City)	11/8~11/9	72	11 V
		(Cwajinia City)	11/9~11/10	1	
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	130	HV
rukuoka Prei.	30	Omuta City Government Building (Omuta City)		130	п٧
			10/5~10/6		
7 D C	2.1		10/6~10/7	7.5	1477
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	75	MV
7 . D. C	22	V . D C . 11 C . CD 11 II 14 1	11/7 11/0	16	1117
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$ $11/8 \sim 11/9$	46	HV
		Environmental Science (Udo City)			
1:50	22		11/9~11/10	70	
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	72	MV
		Environment (Miyazaki City)			
	2.	Tr. 11 D.C. 17 div. 2 D. 1	0/06 0/07	100	****
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	100	HV
		and Public Health (Kagoshima City)	9/27~9/28		
	L_		9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	33	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) \*: Indicates the sum value of the Quantification [Detection] limits of each congeners.

## [1-1] Monochlorobiphenyls/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	7.8
Median	8.2
Maximum	38
Minimum	0.87

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	•
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	7.0	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	1.9	HV
			10/4~10/5 10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	8.9	HV
		ougo i in Quanty interneting sunten (Tunizuwa eny)	9/28~9/29	0.5	
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	4.0	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	4.8	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	14	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	14	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	2.5	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$ \begin{array}{c} 11/8 \sim 11/9 \\ 11/9 \sim 11/10 \\ 11/10 \sim 11/11 \end{array} $	12	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	14	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28	6.5	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/28~9/29 9/12~9/13 9/13~9/14	14	HV
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	8.3	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
Vamanash: Df	1.4	Vomanachi Duofeetuud Institute - f.Dl.U IIld d	9/14~9/15	4.0	7137
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/26~9/27 9/27~9/28	4.0	HV
		Environment (Kota City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	8.4	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	23	HV
OHU FIEL	10	Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$	23	п٧
		Environmental Sciences (Nakannganara City)	$10/25 \sim 10/26$ $10/26 \sim 10/27$		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	$10/26 \sim 10/27$ $10/4 \sim 10/11$	14	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	28	HV
		(Yokkaichi City)	10/25~10/26		
W + D :C	10	W + D C + T G : H' 1 G 1 1 / T G C )	10/26~10/27	0.2	7 7 7
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27 9/27~9/28	8.2	HV
	ì	i			
			9/28~9/29		
Osaka Pref	10	Osaka Joint Prefectural Government Ruilding Ruilding 2	9/28~9/29 10/11~10/12	8.2	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$9/28 \sim 9/29$ $10/11 \sim 10/12$ $10/12 \sim 10/13$	8.2	HV

Local communities	No.	Monitored sites		season	Air sampler
Local confinuities	110.	WOIITOICU SICS	Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	12	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	10/3~10/4	8.2	HV
·		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	4.9	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	1.1	HV
		(	10/25~10/26		
			$10/26 \sim 10/27$	ł	
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20}{10/17} \sim 10/18$	5.8	HV
III OSIIII III CIty		Thrownia City Rokumiji sumoi riigii school (riitosiilila City)	10/18~10/19	3.0	11 V
			$10/19 \sim 10/19$	1	
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	10	MV
i amaguchi Prei.	23	Environment (Yamaguchi City)	9/13/~9/20	10	IVI V
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	7.3	MV
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$	6.2	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental Sciences and Public Health (Takamatsu City)	9/27~10/4	16	MV
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	6.2	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	13	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	6.9	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	12	HV
		Environmental Science (Udo City)	11/8~11/9	1	
			11/9~11/10	1	
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	38	MV
,		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	8.5	HV
		and Public Health (Kagoshima City)	9/27~9/28	]	
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	0.87	HV
			9/27~9/28	]	
	1		9/28~9/29	1	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

### [1-2] Dichlorobiphenyls/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	25
Median	26
Maximum	52
Minimum	5.6

Local communities	No.	Monitored sites		season	Air sampler
Local communities	INO.	Wolltored sites	Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	11	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$	7.3	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	18	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	16	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	23	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	35	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	40	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	17	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	28	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	51	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	28	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	44	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	23	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	45	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	19	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	24	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	39	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	18	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	48	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	35	HV

Local communities	No.	Monitored sites		season	Air sampler
	110.		Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	39	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	42	HV
		(Kobe City)	10/4~10/5	1	
			10/5~10/6	1	
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	27	HV
			10/25~10/26	1	
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	5.6	HV
			10/25~10/26	1	
			10/26~10/27	ì	
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	24	HV
		(Thousand only)	10/18~10/19	1 -	
			$10/19 \sim 10/20$	1	
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	37	MV
i amaguem i iei.	23	Environment (Yamaguchi City)	7/13 7/20	37	IVI V
		Environment (Tamagueni City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	39	MV
	20	Tragi freaturand werrare center (fragi enty)	9/13 - 9/20	39	1 <b>V1 V</b>
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	18	HV
i okusiiiiia Piei.	21	· · · · · · · · · · · · · · · · · · ·	$10/24 \sim 10/23$ $10/25 \sim 10/26$	16	пν
		Environmental Sciences Center (Tokushima City)			
V D C	20	Kagawa Prefectural Research Institute for Environmental	10/26~10/27	52	) (T)
Kagawa Pref.	28		$9/27 \sim 10/4$	52	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	15	HV
anime Prei.	29			. 15	ΗV
		(Uwajima City)	11/8~11/9		
E 1 1 D C	20	O + G' · G + P · H · · (O + · · G' · )	11/9~11/10	2.1	****
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	31	HV
			10/5~10/6		
			10/6~10/7		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	26	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	17	HV
		Environmental Science (Udo City)	11/8~11/9	ļ l	
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	15	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	32	HV
		and Public Health (Kagoshima City)	9/27~9/28		
	L		9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	14	HV
			9/27~9/28		
	1		9/28~9/29	1	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

# [1-3] Trichlorobiphenyls/air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	21
Median	22
Maximum	57
Minimum	5.1

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	9.2	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	5.1	HV
			$10/4 \sim 10/5$ $10/5 \sim 10/6$		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	10	HV
iwate i ici.	3	Sugo Ali Quality Molitoring Station (Takizawa City)	9/28~9/29	10	11 V
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$\frac{9/29^{-6}9/30}{10/24 \sim 10/31}$	9.2	MV
wiiyagi Fici.	4	(Sendai City)	10/24 - 10/31	9.2	IVI V
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	12	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	26	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	43	MV
		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	11	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	27	HV
			11/9~11/10		
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	41	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	28	HV
C			9/27~9/28		
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	32	HV
•			9/13~9/14		
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	18	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	32	HV
		Environment (Kofu City)	9/27~9/28		
			9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	11/7~11/14	25	MV
		(Nagano City)			
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	22	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	41	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	12	HV
		(Yokkaichi City)	10/25~10/26		
			10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	57	HV
			9/27~9/28		
	<u></u>		9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	10/11~10/12	42	HV
	l	Annex (Osaka City)	10/12~10/13		
		ramen (obana ony)			

Local communities	No.	Monitored sites	Warm	season	Air sampler
Local communities	110.	iviointored sucs	Sampling dates	Measured value	•
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	38	HV
			9/27~9/28		
			9/28~9/29	1	
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	49	HV
•		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	$10/24 \sim 10/25$	15	HV
vara i ici.		Tomit in Quanty Monitoring Station (Tellit City)	$10/25 \sim 10/26$	13	11 '
			$10/26 \sim 10/27$		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$10/20 - 10/27$ $10/24 \sim 10/25$	6.5	HV
Sillilane Fiel.	23	Oki National Acid Kani Observatory (Okinosinina Town)		0.5	11 V
			10/25~10/26		
T. 1: C:	2.4	Tr. 1: C: W1 - "'I : Tr.1 G1 1 (Tr. 1: C:)	10/26~10/27	10	****
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	18	HV
			10/18~10/19		
			10/19~10/20		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	$9/13 \sim 9/20$	37	MV
		Environment (Yamaguchi City)			
	26	Hagi Health and Welfare Center (Hagi City)	$9/13 \sim 9/20$	38	MV
Гokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	21	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
		`	10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	55	MV
8		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	10	HV
		(Uwajima City)	11/8~11/9		
		(Civilina Civi)	11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	22	HV
rukuoka 11ci.	30	Official City Government Building (Official City)	10/4 - 10/3 $10/5 \sim 10/6$	22	11 V
7 Df	2.1	S P	$10/6 \sim 10/7$ $9/27 \sim 10/4$	22	MV
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/2/\sim 10/4$	23	MV
. D. C	22	W D. C 11 C CD 11 H 11 1	11/7 11/0	0.2	****
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	9.2	HV
		Environmental Science (Udo City)	11/8~11/9	,	
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	9.5	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	28	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	11	HV
			9/27~9/28	1	
			9/28~9/29	j l	
	1		7,20 7,27		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

### [1-4] Tetrachlorobiphenyls/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	12
Median	14
Maximum	40
Minimum	2.9

Local communities	No.	Monitored sites		season	Air sampler
Local communities	INO.	Wolltored sites	Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	4.4	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$	2.9	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	4.6	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	4.2	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	6.5	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	14	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	29	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	4.3	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	20	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	33	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	15	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	23	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	11	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	22	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	13	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	12	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	18	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	7.6	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	35	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	37	HV

Local communities	No.	Monitored sites		season	Air sampler
	110.		Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	32	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	40	HV
		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	8.4	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	3.3	HV
			10/25~10/26		
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/17 \sim 10/18$	14	HV
III John City		The second of the second second (1111001111111111111111111111111111111	10/17 10/18	1 1	11 7
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	24	MV
i amagucini Fiei.	23	Environment (Yamaguchi City)	9/13/ - 9/20	24	IVI V
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	31	MV
	20	Hagi Health and Wehare Center (Hagi City)	9/13/ ~ 9/20	31	IVI V
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	12	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
		,	10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	36	MV
8		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	6.0	HV
		(Uwajima City)	11/8~11/9		
			$11/9 \sim 11/10$		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	17	HV
			$10/5 \sim 10/6$		
			10/6~10/7		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	12	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	4.7	HV
ixumamoto 1 ici.	32	Environmental Science (Udo City)	11/8~11/8	7./	11 V
		Environmental Science (Odo City)			
Missogolzi Peof	22	Miyozoki Drofostural Instituto for Duklin Hankland	11/9~11/10	5.1	MV
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)	10/11~10/18	5.1	IVI V
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	20	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	$9/26 \sim 9/27$	5.2	HV
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	$9/26 \sim 9/27$ $9/27 \sim 9/28$	5.2	HV

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

### [1-4-1] 3,3',4,4'-Tetrachlorobiphenyl (#77) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 33/36 (Missing value: 0)
Detection Frequency (sample): 33/36 (Missing value: 0)

	Aggregated value
Geometric mean	0.07
Median	0.08
Maximum	0.27
Minimum	nd

2 3 4 5 6 7	Monitored sites  Kamikawa General Subprefectural Bureau (Asahikawa City)  Sapporo Art Park (Sapporo City)  Sugo Air Quality Monitoring Station (Takizawa City)  Miyagi Prefectural Institute of Public Health and Environment (Sendai City)  Yamagata Institute of Environmental Sciences (Murayama City)  Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)  Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	Sampling dates  10/4~10/11  10/3~10/4 10/4~10/5 10/5~10/6 9/27~9/28 9/28~9/29 9/29~9/30 10/24~10/31  9/26~10/3  10/17~10/24	Measured value	Air sampler  MV  HV  HV  MV  MV
2 3 4 5 6 7	Sapporo Art Park (Sapporo City)  Sugo Air Quality Monitoring Station (Takizawa City)  Miyagi Prefectural Institute of Public Health and Environment (Sendai City)  Yamagata Institute of Environmental Sciences (Murayama City)  Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)  Tokyo Metropolitan Research Institute for Environmental	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$ $9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$ $10/24 \sim 10/31$ $9/26 \sim 10/3$ $9/27 \sim 10/4$	tr(0.02)  0.04  tr(0.03)  0.06	HV HV MV
3 4 5 6 7	Sugo Air Quality Monitoring Station (Takizawa City)  Miyagi Prefectural Institute of Public Health and Environment (Sendai City)  Yamagata Institute of Environmental Sciences (Murayama City)  Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)  Tokyo Metropolitan Research Institute for Environmental	$   \begin{array}{r}     10/4 \sim 10/5 \\     10/5 \sim 10/6 \\     9/27 \sim 9/28 \\     9/28 \sim 9/29 \\     9/29 \sim 9/30 \\     10/24 \sim 10/31 \\   \end{array} $ $   \begin{array}{r}     9/26 \sim 10/3 \\     9/27 \sim 10/4   \end{array} $	0.04 tr(0.03)	HV MV MV
<ul><li>4</li><li>5</li><li>6</li><li>7</li><li>8</li></ul>	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)  Yamagata Institute of Environmental Sciences (Murayama City)  Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)  Tokyo Metropolitan Research Institute for Environmental	$   \begin{array}{r}     10/5 \sim 10/6 \\     9/27 \sim 9/28 \\     9/28 \sim 9/29 \\     9/29 \sim 9/30 \\     10/24 \sim 10/31 \\     \hline     9/26 \sim 10/3 \\     9/27 \sim 10/4   \end{array} $	tr(0.03)	MV MV
<ul><li>4</li><li>5</li><li>6</li><li>7</li><li>8</li></ul>	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)  Yamagata Institute of Environmental Sciences (Murayama City)  Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)  Tokyo Metropolitan Research Institute for Environmental	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$ $10/24 \sim 10/31$ $9/26 \sim 10/3$ $9/27 \sim 10/4$	tr(0.03)	MV MV
5 6 7 8 8	(Sendai City)  Yamagata Institute of Environmental Sciences (Murayama City)  Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)  Tokyo Metropolitan Research Institute for Environmental	9/26~10/3 9/26~10/3	0.06	MV
5 6 7 8 8	(Sendai City)  Yamagata Institute of Environmental Sciences (Murayama City)  Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)  Tokyo Metropolitan Research Institute for Environmental	9/26~10/3 9/27~10/4	0.06	MV
7	City)  Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)  Tokyo Metropolitan Research Institute for Environmental	9/27~10/4		
7 8	City)  Tokyo Metropolitan Research Institute for Environmental		0.08	MV
7 8	City)  Tokyo Metropolitan Research Institute for Environmental			
8		10/17~ :10/24		
		10/1/~10/24	0.14	MV
9	Chichijima Island (Ogasawara Village)	11/8~11/15	tr(0.03)	MV
	Kanagawa Environmental Research Center (Hiratsuka City)	$ \begin{array}{c} 11/8 \sim 11/9 \\ 11/9 \sim 11/10 \\ 11/10 \sim 11/11 \end{array} $	0.15	HV
	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.17	MV
11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28	0.11	HV
12	Tonami Air Quality Monitoring Station (Tonami City)	$9/28 \sim 9/29$ $9/12 \sim 9/13$ $9/13 \sim 9/14$	0.27	HV
		9/14~9/15		
-	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/12~9/13 9/13~9/14	0.07	HV
		9/14~9/15		
			0.13	HV
	Environment (Kotu City)			
15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	0.09	MV
		10/24~10/25	0.05	HV
	Environmental Sciences (Kakamigahara City)			
17	Chikusa Ward Heiwa Park (Nagoya City)	$\frac{10/26 \sim 10/27}{10/4 \sim 10/11}$	0.11	MV
				-
18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	10/25~10/26	0.04	HV
19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27 9/27~9/28	0.20	HV
19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/11~10/12 10/12~10/13	0.23	HV
1 1 1	5 6 7 8	Environment (Kofu City)  5 Nagano Environmental Conservation Research Institute (Nagano City)  6 Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)  7 Chikusa Ward Heiwa Park (Nagoya City)  8 Mie Prefecture Health and Environment Research Institute (Yokkaichi City)  9 Kyoto Prefecture Joyo Senior High School (Joyo City)  9 Osaka Joint Prefectural Government Building, Building 2	4 Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)  8 Mie Prefecture Health and Environment Research Institute (Yokkaichi City)  9 Mie Prefecture Health and Environment Research Institute (Yokkaichi City)  8 Mie Prefecture Joyo Senior High School (Joyo City)  9 Osaka Joint Prefectural Government Building, Building 2  9 $9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/28 \sim 9/29$	4 Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)  5 Nagano Environmental Conservation Research Institute (Nagano City)  6 Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)  7 Chikusa Ward Heiwa Park (Nagoya City)  8 Mie Prefecture Health and Environment Research Institute (Yokkaichi City)  9 Kyoto Prefecture Joyo Senior High School (Joyo City)  9 Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)  10.13  9 $9/26 \sim 9/27$ 9 $9/26 \sim 9/27$ 9 $9/26 \sim 9/27$ 9 $9/26 \sim 9/27$ 9 Osaka Joint Prefectural Government Building, Building 2 $10/11 \sim 10/12$ 10.13  11.7  11.

Local communities	No.	Monitored sites	Warm	season	Air sampler	
Local communities	1710 Information		Sampling dates Measured value		An sampler	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	0.15	HV	
			9/27~9/28			
			9/28~9/29			
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	0.13	HV	
,		(Kobe City)	10/4~10/5			
		•	10/5~10/6			
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	0.04	HV	
ruru I IOI.		Tomi 7 in Quanty Monitoring Station (Tomi City)	$10/25 \sim 10/26$	0.01	11 '	
			$10/26 \sim 10/27$			
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$10/24 \sim 10/25$	tr(0.03)	HV	
Similane i ici.	23	OKI Ivational Acid Rain Observatory (Okinosinna Town)	10/24 - 10/25 $10/25 \sim 10/26$	11(0.03)	11 V	
			$10/26 \sim 10/20$			
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/20 < 10/27$ $10/17 \sim 10/18$	0.10	HV	
Hirosnima City	24	Hirosnima City Kokutaiji Junior High School (Hirosnima City)		0.10	нv	
			10/18~10/19			
1:5 0	2.5	Y 1.D.C. 17	10/19~10/20	0.14	100	
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	0.14	MV	
		Environment (Yamaguchi City)				
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	0.22	MV	
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$	0.07	HV	
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$			
			$10/26 \sim 10/27$			
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	0.20	MV	
		Sciences and Public Health (Takamatsu City)				
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	0.06	HV	
		(Uwajima City)	11/8~11/9			
			11/9~11/10			
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	0.15	HV	
		J 5 7 7	$10/5 \sim 10/6$			
			$10/6 \sim 10/7$			
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	0.06	MV	
Sugu i ici.	31	Suga i relecturar Environmentar researen center (Suga City)	3/2/ 10/4	0.00	141 4	
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV	
Kumamoto 1 ici.	32	Environmental Science (Udo City)	11/8~11/8	na	11 V	
		Environmental Science (Odo City)				
Miyazaki Pref.	22	Miyazaki Prefectural Institute for Public Healthand	$11/9 \sim 11/10$ $10/11 \sim 10/18$	tr(0.03)	MV	
wiiyazaki Prei.	33	1 · ·	10/11~10/18	tr(0.03)	IVI V	
		Environment (Miyazaki City)				
r. 1: 2 0	2:	W 11 P 0 4 17 (14 0 P 1	0/06 0/07		****	
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV	
		and Public Health (Kagoshima City)	9/27~9/28			
			9/28~9/29			
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV	
			9/27~9/28			
			9/28~9/29			

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

### [1-4-2] 3,4,4',5-Tetrachlorobiphenyl (#81) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 2/36 (Missing value: 0)
Detection Frequency (sample): 2/36 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.06
Minimum	nd

Local communities	s No. Monitored sites		Warm		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
			10/4~10/5		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$	nd	HV
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$10/24 \sim 10/31$	nd	MV
, &		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	nd	MV
8		City)			
baraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	nd	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	nd	MV
•		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
		, ( , , , , , , , , , , , , , , , , , ,			
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	nd	HV
C			11/9~11/10		
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	nd	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	nd	HV
			9/27~9/28		
F D C	10	The state of the Market State of the state o	9/28~9/29	0.06	****
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12\sim 9/13$ $9/13\sim 9/14$	0.06	HV
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	nd	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	nd	HV
		Environment (Kofu City)	9/27~9/28		
n D C	1.5	N. F. i. i.i.d. i. P. II.dia	9/28~9/29	1	107
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	nd	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
		Environmental Sciences (Kakamigahara City)	$10/25 \sim 10/26$		
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	nd	MV
Mie Pref.	10	Mie Prefecture Health and Environment Research Institute	10/24~10/25	n.d	1137
VIIC FICI.	18	(Yokkaichi City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$	nd	HV
			10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	nd	HV
			9/27~9/28		
2 1 2 6	10	0.1.1.1.0.6.1.10	9/28~9/29	. (0.02)	****
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$\frac{10/11 \sim 10/12}{10/12 \sim 10/13}$	tr(0.02)	HV
	1	LATINEX (USAKA UTIVI	$10/12 \sim 10/13$		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV
		(Kobe City)	$10/4 \sim 10/5$		
			10/5~10/6		
Vara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26	Ì	
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
		(	$10/25 \sim 10/26$		
			$10/26 \sim 10/27$	ł	
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20^{\circ} 10/27}{10/17 \sim 10/18}$	nd	HV
In John City		Thrownia City Rokumiji sumoi riigii school (riitosiilila City)	10/18~10/19	ind.	11 V
			$10/18 \sim 10/19$ $10/19 \sim 10/20$		
Zama ayah: Df	25	Vomeo oveli Duofactivus I Instituta - CD-1-11-11-141		n.d	) 43.7
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	9/13~9/20	nd	MV
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$	nd	HV
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	nd	MV
C		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	nd	HV
unuonu 1101.	50	omata city devermient banding (omata city)	$10/5 \sim 10/6$	ind.	11 ,
			$10/6 \sim 10/7$		
la aa Duaf	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	nd	MV
Saga Pref.	31	Saga Freiecturai Environmentai Research Center (Saga City)	9/27 - 10/4	na	IVI V
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
		Environmental Science (Udo City)	11/8~11/9	]	
			11/9~11/10	1	
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV
•		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28	]	
			9/28~9/29	1	
	<u> </u>	(cita) is based on the number of citas, thus means (the number of detect	7,20 7,27	<u> </u>	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

### [1-5] Pentachlorobiphenyls/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	5.6
Median	6.0
Maximum	34
Minimum	1.2

Local communities	No.	Monitored sites	Warm season		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	1.7	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	1.3	HV
11 7			$10/4 \sim 10/5$		
			10/5~10/6		
wate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	2.2	HV
wate 1 Ici.	5	Sugo in Quanty Monitoring Station (Takizawa City)	9/28~9/29	2.2	11 4
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$10/24 \sim 10/31$	2.1	MV
viiyagi i ici.	7	(Sendai City)	10/24 - 10/31	2.1	IVI V
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	4.1	MV
· winingaria 1111		City)	3,20 10,5		1/1
baraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	5.2	MV
		City)			
Гокуо Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	13	MV
,		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	1.3	MV
	0	Cincingina Island (Ogasawata vinago)	11/6 11/13	1.5	IVI V
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	7.2	HV
tanagawa 1 ICI.	,	Ranagawa Environmentai Research Center (Tinatsuka City)	11/9~11/10	1.2	11 V
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute	10/11~10/18	16	MV
гоконанна Спу	10	(Yokohama City)	10/11 - 10/16	10	1 <b>V1 V</b>
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	7.0	HV
			9/27~9/28	,	
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$	15	HV
oyama rrei.	12	Tollann An Quanty Wolntoring Station (Tollann City)	9/13~9/14	13	11 V
			9/14~9/15		
shikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	5.0	HV
Silikawa Fici.	13	Environmental Science (Kanazawa City)	9/12~9/13	3.0	11 V
		Environmental Science (Kanazawa City)			
/amanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/14~9/15 9/26~9/27	12	HV
amanasın Frei.	14	l l		12	пν
		Environment (Kofu City)	9/27~9/28		
Nagano Pref.	1.5	No como Environmental Concernation Describilitation	9/28~9/29	5.2	1437
Nagano Prei.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	5.2	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	3.8	HV
JIIU I ICI.	10	Environmental Sciences (Kakamigahara City)	$\frac{10/24 \sim 10/25}{10/25 \sim 10/26}$	3.0	11 V
		Environmental Sciences (Kakamiganara City)			
Ja carra Cit-	17	Chiltron Would Hoisen Book (No Cite)	$10/26 \sim 10/27$	0.5	1437
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	9.5	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	3.1	HV
		(Yokkaichi City)	10/25~10/26		
		[	10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	17	HV
,		,	9/27~9/28		
			9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	$\frac{9/28}{10/11} \sim 10/12$	34	HV
Joura I ICI.	17	Annex (Osaka City)	$\frac{10/11 - 10/12}{10/12 \sim 10/13}$	JT	11 V
		I HIROA (OSAKA CITY)			
	1	1	$10/13 \sim 10/14$		

Local communities	No.	Monitored sites	Warm	Air sampler	
	110.		Sampling dates	Measured value	•
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	16	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	10	HV
		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	4.3	HV
			10/25~10/26	1	
			10/26~10/27	1	
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	1.2	HV
		, , , , , , , , , , , , , , , , , , , ,	10/25~10/26		
			10/26~10/27		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	12	HV
J		, , , , , , , , , , , , , , , , , , , ,	10/18~10/19		
			$10/19 \sim 10/20$	j l	
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	7.3	MV
r amagaem r ren.	23	Environment (Yamaguchi City)	J/15 J/20	7.5	111 1
		Zivinomion (1 minguom eng)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	9.3	MV
	20	Tragi Treath and Wenare Center (Tragi City)	7/13 7/20	7.5	141 4
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	6.8	HV
i okusiiiiia i ici.	21	Environmental Sciences Center (Tokushima City)	10/24 - 10/25 $10/25 \sim 10/26$	0.0	11 V
		Environmental Sciences Center (Tokushima City)	$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	19	MV
Kagawa Fici.	20	Sciences and Public Health (Takamatsu City)	9/27 10/4	19	IVI V
		Sciences and I done Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	3.4	HV
Ellillic I ICI.	2)	(Uwajima City)	11/8~11/9	3.4	11 V
		(Owajima City)	11/9~11/10	1	
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	13	HV
ukuoka 11ci.	30	Official City Government Building (Official City)	10/4 - 10/3 $10/5 \sim 10/6$	13	11 V
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$10/6 \sim 10/7$ $9/27 \sim 10/4$	4.5	MV
Saga Prei.	31	Saga Prefectural Environmental Research Center (Saga City)	9/2/~10/4	4.3	IVI V
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	1.5	HV
Kumamoto Pfci.	32		$11/7 \sim 11/8$ $11/8 \sim 11/9$	1.3	11 V
		Environmental Science (Udo City)			
Mi1-: P. C	22	Missauli Dufatauri Indiata f. D. 11' II. 14	11/9~11/10	2.5	147
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	2.5	MV
		Environment (Miyazaki City)			
W 1: D 0	2.4	W 1' D C 4 1 I C 4 C D 1	0/26 0/27	7.0	7777
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	7.8	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	1.5	HV
			9/27~9/28	ļ l	
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

### [1-5-1] 2,3,3',4,4'-Pentachlorobiphenyl (#105) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 35/36 (Missing value: 0)
Detection Frequency (sample): 35/36 (Missing value: 0)

	Aggregated value
Geometric mean	0.15
Median	0.16
Maximum	1.0
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
Local communities	INO.		Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	tr(0.05)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$   \begin{array}{r}     10/3 \sim 10/4 \\     10/4 \sim 10/5 \\     10/5 \sim 10/6   \end{array} $	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	tr(0.05)	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	tr(0.05)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	0.10	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	0.15	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	0.42	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	tr(0.04)	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	0.22	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.51	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	0.20	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	0.57	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	0.11	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.26	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	0.14	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	0.07	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.57	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	tr(0.05)	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.46	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	1.0	HV

Local communities	No.	Monitored sites	Warm	season	Air sampler	
	iviolitored sites		Sampling dates Measured value		Air sampier	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	0.47	HV	
			9/27~9/28			
			9/28~9/29			
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	0.24	HV	
·		(Kobe City)	$10/4 \sim 10/5$			
			10/5~10/6			
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	$10/24 \sim 10/25$	0.12	HV	
			10/25~10/26			
			10/26~10/27			
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$10/24 \sim 10/25$	tr(0.02)	HV	
		(enmessing revis)	$10/25 \sim 10/26$	4(0:02)		
			$10/26 \sim 10/27$			
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/28 - 10/27}{10/17 \sim 10/18}$	0.34	HV	
Tinosinina City	2-7	Throsinna City Rokaanji Jamoi Tiigii School (Tirosinna City)	10/18~10/19	0.54	11 (	
			$\frac{10/18 - 10/19}{10/19 \sim 10/20}$			
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	0.26	MV	
i amaguciii Fici.	23	Environment (Yamaguchi City)	9/13/ - 9/20	0.20	IVI V	
		Environment (1 amagueni City)				
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	0.59	MV	
	20	hagi health and wellare center (hagi city)	9/13/~9/20	0.39	IVI V	
T 1 1: D 6	27	The state of the s	10/24 10/25	0.17	****	
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	0.17	HV	
		Environmental Sciences Center (Tokushima City)	10/25~10/26			
			10/26~10/27			
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	0.60	MV	
		Sciences and Public Health (Takamatsu City)				
			11.5			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	0.06	HV	
		(Uwajima City)	11/8~11/9			
			$11/9 \sim 11/10$			
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	0.36	HV	
			$10/5 \sim 10/6$			
			$10/6 \sim 10/7$			
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	0.12	MV	
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	0.07	HV	
		Environmental Science (Udo City)	$11/8 \sim 11/9$			
			11/9~11/10			
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	0.07	MV	
		Environment (Miyazaki City)				
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	0.26	HV	
-		and Public Health (Kagoshima City)	9/27~9/28			
			9/28~9/29			
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	tr(0.04)	HV	
			9/27~9/28			
			9/28~9/29			
	1	1	J. 20 J. 27	I		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

### [1-5-2] 2,3,4,4',5-Pentachlorobiphenyl (#114) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 16/36 (Missing value: 0)
Detection Frequency (sample): 16/36 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.02)
Median	nd
Maximum	0.09
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	season  Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	$10/4 \sim 10/11$	nd	MV
TORKAIGO	1	Ramikawa Generai Suopretecturai Bureau (Asanikawa City)	10/4/~10/11	iid	1V1 V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
support only	-	Suppore The Fair (Suppore Sug)	10/4~10/5		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	nd	HV
111111111111111111111111111111111111111		sugerim Quanty momenting sunten (runnawa eny)	9/28~9/29		
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/24~10/31	nd	MV
, 8		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	nd	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	tr(0.02)	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	0.04	MV
•		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	tr(0.02)	HV
•			11/9~11/10		
			11/10~11/11	1	
Yokohama City	10	Yokohama Environmental Science Research Institute	10/11~10/18	0.05	MV
•		(Yokohama City)			
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	tr(0.02)	HV
			9/27~9/28		
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	0.07	HV
			9/13~9/14		
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	nd	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	tr(0.03)	HV
		Environment (Kofu City)	9/27~9/28		
			9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	$11/7 \sim 11/14$	tr(0.02)	MV
		(Nagano City)			
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26	1	
			10/26~10/27	j l	
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.04	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	nd	HV
		(Yokkaichi City)	10/25~10/26	j l	
	<u> </u>		10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	0.04	HV
			9/27~9/28	]	
			9/28~9/29	<u>                                       </u>	
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	10/11~10/12	0.09	HV
		Annex (Osaka City)	10/12~10/13		
	l		10/13~10/14	1	

Local communities	No.	No. Monitored sites	Warm	Air sampler	
			Sampling dates	Measured value	ran samplei
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	0.04	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	tr(0.03)	HV
ř		(Kobe City)	10/4~10/5	, ,	
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
		(enmession rem)	$10/25 \sim 10/26$	11.0	
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/17 \sim 10/18$	tr(0.03)	HV
Tinosinna City	24	Throshina City Rokutaiji Julioi Tiigii School (Tiiroshina City)	10/18~10/19	u(0.03)	11 V
			$10/19 \sim 10/19$		
V	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
Yamaguchi Pref.	23		9/13/~9/20	na	IVI V
		Environment (Yamaguchi City)			
	26	H :H 14 1W10 C + (H :C:()	9/13~9/20	1	1.07
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
T 1 1: D 0			10/01 10/05	(0.00)	****
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	tr(0.02)	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	nd	MV
		Sciences and Public Health (Takamatsu City)			
			11.5		
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	nd	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	tr(0.02)	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV
*		Environment (Miyazaki City)			
		, , ,			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
3	1	and Public Health (Kagoshima City)	9/27~9/28		
		( <b>g</b> 5 <b>.</b> 7)	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
Okinawa 1101.		cupe frede (framgain + mage)	9/27~9/28	IIG	11 4
			9/28~9/29		
	1		7120 T7127		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

### [1-5-3] 2,3',4,4',5-Pentachlorobiphenyl (#118) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	0.40
Median	0.44
Maximum	3.0
Minimum	tr(0.06)

Local communities	No.	Monitored sites	Warm		Air sampler	
			Sampling dates	Measured value		
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	tr(0.10)	MV	
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	tr(0.06)	HV	
11 ,			10/4~10/5	, ,		
			10/5~10/6			
wate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	0.13	HV	
			$9/28 \sim 9/29$ $9/29 \sim 9/30$			
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$\frac{9/29}{59/30}$ $\frac{10/24}{10/31}$	0.17	MV	
viiyugi i ioi.		(Sendai City)	10/21 10/31	0.17	111 7	
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	0.27	MV	
		City)				
baraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	0.35	MV	
		City)				
Гокуо Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	1.1	MV	
		Protection (Koto Ward)				
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	tr(0.11)	MV	
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	0.52	HV	
			11/9~11/10			
			11/10~11/11			
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	1.3	MV	
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	0.52	HV	
			9/27~9/28			
			9/28~9/29			
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12\sim9/13$ $9/13\sim9/14$	1.3	HV	
			9/13/~9/14			
shikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	0.36	HV	
	10	Environmental Science (Kanazawa City)	9/13~9/14	0.50		
		`	9/14~9/15			
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	0.73	HV	
		Environment (Kofu City)	9/27~9/28			
n D C			9/28~9/29	0.20		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	0.38	MV	
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	0.19	HV	
	'	Environmental Sciences (Kakamigahara City)	$10/25 \sim 10/26$	V/	-11 1	
			10/26~10/27			
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	1.1	MV	
Mie Pref.	10	Mie Prefecture Health and Environment Research Institute	10/24~10/25	0.17	HV	
viic 1 101.	18	(Yokkaichi City)	$10/24 \sim 10/23$ $10/25 \sim 10/26$	0.17	11 V	
			10/26~10/27			
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	1.3	HV	
			9/27~9/28			
21 P£	10	Only List Buck stord Correspond (D. 11) D. 11.	9/28~9/29	2.0	7757	
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$\frac{10/11 \sim 10/12}{10/12 \sim 10/13}$	3.0	HV	
	Ī	Panica (Osaka City)	$10/12 \sim 10/13$ $10/13 \sim 10/14$			

Local communities	M.	. Monitored sites	Warm	season	A in complan
Local communities	No.		Sampling dates	Measured value	Air sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	1.3	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	10/3~10/4	0.62	HV
,		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	0.33	HV
1 (414 1 1 1 1 1		Tomit in Quality Hometing States (Tomit City)	$10/25 \sim 10/26$	0.55	
			$10/26 \sim 10/27$		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$10/24 \sim 10/25$	tr(0.06)	HV
Similanc 1 ici.	23	Okt i vational 7 keid Rain Observatory (Okthosimila 10wil)	$10/25 \sim 10/26$	11(0.00)	11.4
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/20 < 10/27$ $10/17 \sim 10/18$	0.93	HV
rirosiiina City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)		0.93	Пν
			10/18~10/19		
1: D. C	2.5	V 1'D C 11 C 1 CD 11' II 14 1	10/19~10/20	0.52	107
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	0.52	MV
		Environment (Yamaguchi City)			
			0.11.0		
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	0.78	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$	0.51	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	1.5	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	$11/7 \sim 11/8$	0.24	HV
		(Uwajima City)	$11/8 \sim 11/9$		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	1.2	HV
			$10/5 \sim 10/6$		
			10/6~10/7		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	0.32	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	tr(0.10)	HV
		Environmental Science (Udo City)	11/8~11/9	\ /	
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	0.19	MV
	55	Environment (Miyazaki City)	10,11 10,10	"/	1.1 ,
		(,			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	0.57	HV
ragosiiiia 1101.	54	and Public Health (Kagoshima City)	9/27~9/28	0.57	11 V
		and I done Health (Magosinina City)	9/28~9/29		
Okinawa Pref.	25	Cono Hodo (Kunigami Villaga)		te(0.10)	HV
Okinawa Prei.	35	Cape Hedo (Kunigami Village)	9/26~9/27	tr(0.10)	пν
			9/27~9/28		
	<u> </u>		9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

### [1-5-4] 2',3,4,4',5-Pentachlorobiphenyl (#123) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 22/36 (Missing value: 0)
Detection Frequency (sample): 22/36 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.01)
Median	tr(0.01)
Maximum	0.06
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	season  Measured value	Air sampler
Hokkaido	1	Vamikava Ganaral Submrafaatural Buraau (Acabikawa City)	Sampling dates $10/4 \sim 10/11$	nd	MV
поккатао	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	na	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
11 ,			10/4~10/5		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	nd	HV
			9/28~9/29		
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	tr(0.01)	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	tr(0.01)	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	tr(0.02)	MV
,		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
		(-8			212 .
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	tr(0.01)	HV
			11/9~11/10		
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	tr(0.02)	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	tr(0.01)	HV
			9/27~9/28		
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	tr(0.03)	HV
			9/13~9/14		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/14~9/15 9/12~9/13	tr(0.01)	HV
ISIIKawa FICI.	13	Environmental Science (Kanazawa City)	9/13~9/14	u(0.01)	11 V
		Environmental Science (Ranazawa City)	9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	tr(0.02)	HV
		Environment (Kofu City)	9/27~9/28	` '	
			9/28~9/29	<u>                                     </u>	
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	tr(0.01)	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	tr(0.01)	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	tr(0.02)	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	tr(0.01)	HV
	10	(Yokkaichi City)	10/25~10/26	(0.01)	11,
** ***			10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	tr(0.03)	HV
			9/27~9/28		
Osaka Pref.	10	Osaka Joint Prefectural Government Building, Building 2	9/28~9/29 10/11~10/12	0.06	HV
Osaka Piel.	19	Annex (Osaka City)	$\frac{10/11 \sim 10/12}{10/12 \sim 10/13}$	0.06	нv
			10/1/ ~ 10/13		

Local communities	No.	Monitored sites	Warm	season	Air sampler
	NO.		Sampling dates	Measured value	All sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	tr(0.03)	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	tr(0.02)	HV
·		(Kobe City)	10/4~10/5	, ,	
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	tr(0.01)	HV
			10/25~10/26	(* * )	
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
		(enmessing revis)	$10/25 \sim 10/26$	11.0	
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/17 \sim 10/18$	tr(0.02)	HV
Tinosiiiia City	24	Throshina City Rokutaiji Julioi Tiigii School (Tiiroshina City)	10/18~10/19	11(0.02)	11 V
			$10/19 \sim 10/20$		
Vama ayahi Daaf	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
Yamaguchi Pref.	23		9/13/~9/20	na	IVI V
		Environment (Yamaguchi City)			
	26	H :H 14 1W16 C + (H :C:()	9/13~9/20	1	1.07
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
m 1 1: p 2			10/01 10/05	(0.01)	****
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	tr(0.01)	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	nd	MV
		Sciences and Public Health (Takamatsu City)			
			11.5		
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	nd	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	tr(0.02)	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	tr(0.01)	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
J		and Public Health (Kagoshima City)	9/27~9/28		
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
		1 - (	9/27~9/28		'
			9/28~9/29		
	<u> </u>		7120 7127		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

### [1-5-5] 3,3',4,4',5-Pentachlorobiphenyl (#126) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 19/36 (Missing value: 0)
Detection Frequency (sample): 19/36 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	tr(0.01)
Maximum	0.09
Minimum	nd

Local communities	No.	Monitored sites		season Magazzad value	Air sampler
Hokkaido	1	Vamiliania Cananal Sylmosfactural Dynasy (Asahilanya City)	Sampling dates 10/4~10/11	Measured value nd	MV
ноккатао	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	na	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
11 7			10/4~10/5		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	tr(0.01)	HV
			9/28~9/29	ì í	
			9/29~9/30	1	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	tr(0.01)	MV
i amagata i ici.	)	City)	9/20 - 10/3	u(0.01)	1 <b>V1 V</b>
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	tr(0.01)	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	tr(0.02)	MV
101170 11101.		Protection (Koto Ward)	10/1/ 10/24	4(0.02)	171 7
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	tr(0.01)	HV
8			11/9~11/10		
			11/10~11/11	1	
Yokohama City	10	Yokohama Environmental Science Research Institute	10/11~10/18	tr(0.01)	MV
•		(Yokohama City)			
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	tr(0.01)	HV
C			9/27~9/28	, ,	
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	0.09	HV
			9/13~9/14		
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	tr(0.01)	HV
		Environmental Science (Kanazawa City)	9/13~9/14	1	
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	tr(0.01)	HV
		Environment (Kofu City)	9/27~9/28	j l	
			9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	11/7~11/14	tr(0.01)	MV
		(Nagano City)			
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
	10	Environmental Sciences (Kakamigahara City)	10/24 - 10/25 $10/25 \sim 10/26$		11 ,
		(	$10/26 \sim 10/27$	i l	
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	tr(0.01)	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	nd	HV
		(Yokkaichi City)	10/25~10/26	]	
			10/26~10/27	<u>                                       </u>	
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	tr(0.01)	HV
			9/27~9/28	]	
	L		9/28~9/29	<u>                                       </u>	
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	10/11~10/12	tr(0.02)	HV
		Annex (Osaka City)	10/12~10/13		
	1		10/13~10/14	1	

Local communities	No	No. Monitored sites	Warm season		Air sampler
	110.		Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	tr(0.01)	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	tr(0.01)	HV
		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	tr(0.01)	HV
			10/25~10/26	, , ,	
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
		, , , , , , , , , , , , , , , , , , , ,	10/25~10/26		
			10/26~10/27		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	tr(0.01)	HV
,		, , , <u>g</u> .: ( ( (	10/18~10/19	()	
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
r amagaem r ren.	23	Environment (Yamaguchi City)	J/15 J/20	ii d	111 1
		Zivinomion (1 minguom eng)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
	20	Tragi Treath and Wenare Center (Tragi City)	7/13 7/20	na	141 4
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	nd	HV
i okusiiiiia i ici.	21	Environmental Sciences Center (Tokushima City)	10/24 - 10/25 $10/25 \sim 10/26$	na	11 V
		Environmental Sciences Center (Tokushima City)	$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	nd	MV
Kagawa Fici.	20	Sciences and Public Health (Takamatsu City)	9/27 10/4	IIG	IVI V
		Sciences and I done Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
Jilline I Iei.	2)	(Uwajima City)	11/8~11/9	na	11 4
		(Owajima City)	11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	nd	HV
rukuoka 11ci.	30	Official City Government Building (Official City)	10/4 - 10/3 $10/5 \sim 10/6$	na	11 V
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$10/6 \sim 10/7$ $9/27 \sim 10/4$	tr(0.02)	MV
Saga Prei.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27 ~ 10/4	u(0.02)	IVI V
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
xumamoto Frei.	32	Environmental Science (Udo City)	$11/7 \sim 11/8$ $11/8 \sim 11/9$	na	11 V
		Environmental Science (Odo City)	11/8~11/9		
Missagalsi Duaf	22	Microgali Duefestanal Institute for Dublic Healths:		nd nd	MV
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	nd	IVI V
		Environment (Miyazaki City)			
V 1- : D C	2.4	Variable Definition I I stirt for Engineering 1D	0/26 - 0/27	1	1137
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
		and Public Health (Kagoshima City)	9/27~9/28		
O1: P. 6	2.5	C H 1 (K : 'K'II )	9/28~9/29	1	7777
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28		
	1		$9/28 \sim 9/29$		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

### [1-6] Hexachlorobiphenyls/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site) : 36/36 (Missing value : 0)
Detection Frequency (sample) : 36/36 (Missing value : 0)

	Aggregated value
Geometric mean	2.4
Median	2.4
Maximum	22
Minimum	0.56

Local communities	No.	Monitored sites		season	Air sampler	
Local communities	INO.	Wollitored sites	Sampling dates	Measured value	All sampler	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	0.64	MV	
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$	0.56	HV	
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	0.81	HV	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	0.85	MV	
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	1.9	MV	
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	2.0	MV	
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	4.7	MV	
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	0.80	MV	
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	2.7	HV	
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	5.9	MV	
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	3.0	HV	
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	7.3	HV	
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	2.0	HV	
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	3.8	HV	
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	2.0	MV	
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	1.2	HV	
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	5.5	MV	
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{c}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	0.99	HV	
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	6.3	HV	
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	13	HV	

Local communities	No.	Monitored sites	Warm	season	Air sampler
Local communities	110.	iviointoled sites	Sampling dates	Measured value	All sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	6.9	HV
			9/27~9/28	Î	
			9/28~9/29	1	
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	3.9	HV
•		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	1.7	HV
vara i ioi.		Tomit in Quanty Womening Station (Tomit City)	$10/25 \sim 10/26$	1.,	111
			$10/26 \sim 10/27$		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$\frac{10/20}{10/24} \sim 10/25$	0.63	HV
Sillinanc 1 ici.	23	Oki National Acid Rain Observatory (Okinosinina Town)	10/24 - 10/25 $10/25 \sim 10/26$	0.03	11 V
Time-Lines Cites	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/26~10/27	4.7	1137
Hiroshima City	24	Hirosnima City Kokutaiji Junior High School (Hirosnima City)	10/17~10/18	4./	HV
			10/18~10/19		
1170	2.5	Y 1170 C 11 17 17 17 17 17 17 17 17 17 17 17 17	10/19~10/20	2.6	100
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	9/13~9/20	3.0	MV
	26	H. H. H. LW. IC. C. (H. C.)	0/12 0/20	2.0	107
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	3.8	MV
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	3.0	HV
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
		`	10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	7.6	MV
8		Sciences and Public Health (Takamatsu City)	,,_,	,,,	
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	1.5	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	22	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	1.8	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	0.93	HV
ixumamoto 1 ici.	32	Environmental Science (Udo City)	11/8~11/8	0.23	11 V
		Environmental science (Odo City)			
M. 1:D.C	22	M: 1:D C + 11 (* + C D 11; H 14 1	11/9~11/10	1.2	107
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)	10/11~10/18	1.2	MV
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	5.7	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29	1	
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	0.73	HV
			9/27~9/28		
			9/28~9/29	1	
		I .	7,20 7,27	1	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

## $[1\text{-}6\text{-}1]\ 2,3,3',4,4',5\text{-}Hexachlorobiphenyl}\ (\#156)\ /air\ (pg/m^3)$

Monitored year: 2022

Detection Frequency (site): 34/36 (Missing value: 0)
Detection Frequency (sample): 34/36 (Missing value: 0)

	Aggregated value
Geometric mean	0.03
Median	0.03
Maximum	0.19
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	tr(0.01)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
			$10/4 \sim 10/5$ $10/5 \sim 10/6$		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	tr(0.01)	HV
			9/28~9/29	(* * )	
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	tr(0.01)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	tr(0.02)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	0.03	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	0.06	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	tr(0.01)	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	0.03	HV
			11/9~11/10 11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.08	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	0.03	HV
			9/27~9/28		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/28~9/29 9/12~9/13	0.19	HV
Toyama Frei.	12	Tonami Air Quanty Monitoring Station (Tonami City)	9/12~9/13	0.19	п٧
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	tr(0.02)	HV
		Environmental Science (Kanazawa City)	9/13~9/14	, ,	
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	0.03	HV
		Environment (Kofu City)	9/27~9/28		
N, D 0			9/28~9/29	(0.05)	
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	tr(0.02)	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	tr(0.01)	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26	` ′	
	<u> </u>		10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.12	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	tr(0.01)	HV
		(Yokkaichi City)	10/25~10/26	, ,	
Vyjoto Brif	10	Kyoto Prefecture Joyo Senior High School (Joyo City)	$\frac{10/26 \sim 10/27}{9/26 \sim 9/27}$	0.06	HV
Kyoto Prif.	19	Kyoto Fretecture Joyo Senior riigh School (Joyo City)	9/26~9/27 9/27~9/28	0.06	п٧
			9/28~9/29		
	10	Osaka Joint Prefectural Government Building, Building 2	$\frac{9/28}{10/11} \sim 10/12$	0.14	HV
Osaka Pref	19	IOSAKA JOHL Prejecturai Governmeni Billiding, Billiding /			
Osaka Pref.	19	Annex (Osaka City)	$\frac{10/11 - 10/12}{10/12 \sim 10/13}$	0.14	11.

Local communities	No.	Monitored sites	Warm	Air sampler	
			Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	0.07	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	10/3~10/4	0.03	HV
ř		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	tr(0.02)	HV
			10/25~10/26	(* * )	
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
Similane 1 Ten	23	OKI I validna I rola Ram Observatory (Okinosimia Town)	$10/25 \sim 10/26$	na	111
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/20 - 10/27$ $10/17 \sim 10/18$	0.04	HV
rinosiiina City	24	Throshima City Kokutaiji Julioi Tiigii School (Tiiroshima City)	$10/17 \sim 10/18$ $10/18 \sim 10/19$	0.04	11 V
1 . D . C	25	V 1'D C 4 11 4'4 CD 11' II 14 1	$10/19 \sim 10/20$ $9/13 \sim 9/20$	0.03	107
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	0.03	MV
		Environment (Yamaguchi City)			
			0.11.0		
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	0.07	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	tr(0.02)	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	0.09	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	tr(0.02)	HV
		(Uwajima City)	11/8~11/9	` /	
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	0.17	HV
		g (	10/5~10/6		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	0.04	MV
Saga I ICI.	31	Saga i refectural Environmental research Center (Saga City)	7/2/ 10/4	0.04	1V1 V
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	tr(0.01)	HV
Kumamoto Fici.	32	Environmental Science (Udo City)	11/8~11/9	u(0.01)	ΠV
		Environmental Science (Odo City)			
M:1-: P C	22	Missauli Dufatauri Indiata f. D. 11' II. 11. 1	11/9~11/10	t-(0.01)	1.437
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	tr(0.01)	MV
		Environment (Miyazaki City)			
** 1: ~ ^	2 :		0.10 ( 0.10 =	0.0-	****
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	0.07	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	tr(0.01)	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

## $[1\text{-}6\text{-}2]\ 2,3,3',4,4',5'\text{-}Hexachlorobiphenyl}\ (\#157)\ /air\ (pg/m^3)$

Monitored year: 2022

Detection Frequency (site): 25/36 (Missing value: 0)
Detection Frequency (sample): 25/36 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.01)
Median	tr(0.01)
Maximum	0.09
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	season  Measured value	Air sampler
Hokkaido	1	Vamikava Ganaral Submrafaatural Buraau (Acabikawa City)	Sampling dates $10/4 \sim 10/11$	nd	MV
поккатао	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	na	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
11 ,			10/4~10/5		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	nd	HV
			9/28~9/29	1	
			9/29~9/30	1	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	tr(0.01)	MV
i amagata i ioi.		City)	7/20 10/3	u(0.01)	141 4
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	tr(0.01)	MV
		City)	,,_,	(****)	
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	tr(0.02)	MV
11,0 1,100	,	Protection (Koto Ward)	10.17	(0.02)	111 1
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
		Chichijina Island (Ogasawara vinage)	11/6 11/13	na	1 <b>V1</b> V
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	tr(0.01)	HV
			11/9~11/10		
			11/10~11/11	1	
Yokohama City	10	Yokohama Environmental Science Research Institute	10/11~10/18	tr(0.02)	MV
		(Yokohama City)			
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	tr(0.01)	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	0.06	HV
			9/13~9/14		
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	tr(0.01)	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	tr(0.01)	HV
		Environment (Kofu City)	9/27~9/28	j l	
			9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	tr(0.01)	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	n.d	HV
OHA FIEL	10	Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$	nd	пν
		Environmental Sciences (Nakamiganata City)	$10/25 \sim 10/26$ $10/26 \sim 10/27$		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	$10/26 \sim 10/27$ $10/4 \sim 10/11$	0.03	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	nd	HV
		(Yokkaichi City)	10/25~10/26	]	
			10/26~10/27	]	
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	tr(0.01)	HV
•			9/27~9/28	1 1	
			9/28~9/29	1	
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	10/11~10/12	0.03	HV
		Annex (Osaka City)	10/12~10/13	1	
		1	10/13~10/14	i	

Local communities	No.	Monitored sites	Warm	Warm season		
	INO.	Wolltored Sites	Sampling dates	Measured value	Air sampler	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	tr(0.02)	HV	
			9/27~9/28			
			9/28~9/29			
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	tr(0.01)	HV	
·		(Kobe City)	10/4~10/5	, ,		
			$10/5 \sim 10/6$			
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV	
			10/25~10/26			
			10/26~10/27			
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV	
		(enmession rem)	$10/25 \sim 10/26$	11.0		
			$10/26 \sim 10/27$			
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/17 \sim 10/18$	tr(0.01)	HV	
Thoshina City	24	Throshina City Rokutaiji Julioi Tiigii School (Tiiroshina City)	10/18~10/19	4(0.01)	11 V	
			$10/19 \sim 10/19$			
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	tr(0.01)	MV	
i amaguem riel.	23	Environment (Yamaguchi City)	3/13 ~ 3/20	u(0.01)	1V1 V	
		Environment (1 amagueni City)				
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	tr(0.02)	MV	
	20	hagi health and wellare center (hagi city)	9/13/~9/20	u(0.02)	IVI V	
T. 1	27	The state of the s	10/24 10/25	. (0.01)	****	
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	tr(0.01)	HV	
		Environmental Sciences Center (Tokushima City)	10/25~10/26			
			10/26~10/27			
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	0.03	MV	
		Sciences and Public Health (Takamatsu City)				
			11.5	(0.04)		
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	tr(0.01)	HV	
		(Uwajima City)	11/8~11/9			
			11/9~11/10			
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	0.09	HV	
			$10/5 \sim 10/6$			
			$10/6 \sim 10/7$			
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	tr(0.01)	MV	
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	nd	HV	
		Environmental Science (Udo City)	11/8~11/9			
			11/9~11/10			
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	tr(0.01)	MV	
-		Environment (Miyazaki City)		'		
		, , ,				
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	tr(0.02)	HV	
3		and Public Health (Kagoshima City)	9/27~9/28	( = -/		
			9/28~9/29			
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV	
		(	9/27~9/28		-1.	
			9/28~9/29			
	l	1	1140 - 3143			

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

## $[1\text{-}6\text{-}3]\ 2\text{,}3'\text{,}4\text{,}4'\text{,}5\text{,}5'\text{-}Hexachlorobiphenyl}\ (\#167)\ /air\ (pg/m^3)$

Monitored year: 2022

Detection Frequency (site): 30/36 (Missing value: 0)
Detection Frequency (sample): 30/36 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.02)
Median	tr(0.02)
Maximum	0.07
Minimum	nd

Local communities	No.	Monitored sites	Warm	Air sampler	
Local collinations	110.		Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	tr(0.01)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	tr(0.01)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	tr(0.01)	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	0.03	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	tr(0.01)	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	tr(0.02)	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.04	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	tr(0.02)	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	0.07	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	tr(0.01)	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	tr(0.02)	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	tr(0.02)	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	tr(0.01)	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.05	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	nd	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.03	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	0.07	HV

Local communities	No.	Monitored sites	Warm	season	Air sampler
			Sampling dates	Measured value	All sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	0.03	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	10/3~10/4	tr(0.02)	HV
•		(Kobe City)	10/4~10/5	, ,	
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	tr(0.01)	HV
			10/25~10/26	(* * )	
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
Similane 1 Tel.	23	OKI I validna I rola Ram Observatory (Okinosimia Town)	$10/25 \sim 10/26$	in G	111
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/20 - 10/27$ $10/17 \sim 10/18$	tr(0.02)	HV
rinosiiiiia City	24	Throshima City Kokutaiji Julioi Tiigii School (Tiiroshima City)	$10/17 \sim 10/18$ $10/18 \sim 10/19$	u(0.02)	11 V
1'D C	25	V 1'D C 4 11 4'4 CD 11' II 14 1	10/19~10/20	. (0.01)	107
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	tr(0.01)	MV
		Environment (Yamaguchi City)			
			0.11.0		
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	0.03	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$	tr(0.01)	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	0.03	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	tr(0.01)	HV
		(Uwajima City)	11/8~11/9	` ′	
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	0.07	HV
		g (	10/5~10/6		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	tr(0.02)	MV
Saga I ICI.	31	Saga i refectural Environmental research Center (Saga City)	7/2/ 10/4	11(0.02)	1V1 V
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	tr(0.01)	HV
Kumamoto Fiel.	32	Environmental Science (Udo City)	11/8~11/9	u(0.01)	пу
		Environmental science (Odo City)			
M:1-: P C	22	Missauli Dufatauri Indiata f. D. 11' II. 11. 1	11/9~11/10	h-(0,01)	1.43.7
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	tr(0.01)	MV
		Environment (Miyazaki City)			
** 1:	<b> </b>		0.10 ( 0.10 =	0.05	****
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	0.03	HV
		and Public Health (Kagoshima City)	9/27~9/28		
		(g			
		, ,	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
Okinawa Pref.	35	, ,		nd	HV

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

#### [1-6-4] 3,3',4,4',5,5'-Hexachlorobiphenyl (#169) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 1/36 (Missing value: 0)
Detection Frequency (sample): 1/36 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.03
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
** 11 .1	_	W 7 0 101 0 1D (117 0)	Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
11 ,			$10/4 \sim 10/5$		
			10/5~10/6		
wate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	nd	HV
			9/28~9/29		
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	nd	MV
i umagaa i ren		City)	J120 10/3	na -	141 4
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	nd	MV
		City)			
Гокуо Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	nd	MV
		Trotodion (Roto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
T. D. O.			11/0 11/0		
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	nd	HV
			11/9~11/10		
	1.0	W.1.1. D. 1.1.1.1.	11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	nd	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	0.03	HV
			9/13~9/14		
			9/14~9/15		
shikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	nd	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	nd	HV
		Environment (Kofu City)	9/27~9/28		
			9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	nd	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
J114 I ICI.	10	Environmental Sciences (Kakamigahara City)	$\frac{10/24}{10/25} \sim 10/26$	IIU	11 V
		Environmental Sciences (Nakannganara City)	$10/25 \sim 10/26$ $10/26 \sim 10/27$		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	nd	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	nd	HV
		(Yokkaichi City)	10/25~10/26		
	<u> </u>		10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	nd	HV
			9/27~9/28		
	<u> </u>		9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	10/11~10/12	nd	HV
		Annex (Osaka City)	10/12~10/13		
	l		10/13~10/14		

Local communities	No.	Monitored sites	Warm season		Air sampler
			Sampling dates Measured value		
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV
		(Kobe City)	10/4~10/5		
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
			10/25~10/26		
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20^{\circ} 10/27}{10/17 \sim 10/18}$	nd	HV
Tinosinna City	2-7	Throsinna City Rokaanji Jamoi Tiigii School (Tirosinna City)	10/18~10/19	na	11.4
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
i amaguciii Fici.	23		9/13/ 9/20	IIG	IVI V
		Environment (Yamaguchi City)			
	26	H :H 14 1W16 C + (H :C:()	9/13~9/20	1	107
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
m 1 1: p 2			10/01 10/05	1	****
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	nd	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	nd	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	$11/7 \sim 11/8$	nd	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	nd	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	nd	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV
•		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
	] ] ]	and Public Health (Kagoshima City)	9/27~9/28	110	11.1
		and I done Health (Rugosinia City)	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
OKIIIAWA FICI.	ر د	Cape reco (Kuniganii vinage)	9/27~9/28	nu	11 V
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) nd: Not detected

### [1-7] Heptachlorobiphenyls/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 35/36 (Missing value: 0)
Detection Frequency (sample): 35/36 (Missing value: 0)

	Aggregated value
Geometric mean	0.46
Median	0.49
Maximum	14
Minimum	nd

Local communities	No.	Monitored sites	Warm season		Air sampler
Local collinations	INO.	Wolltored sites	Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	0.08	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	0.15	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	0.15	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	0.39	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	0.36	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	0.96	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	0.20	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	0.54	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.89	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	0.78	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	1.7	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	0.35	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.52	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	0.38	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	0.23	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	1.2	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	0.16	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.86	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	1.9	HV

Local communities	No.	Monitored sites	Warm season		Air sampler
	140.		Sampling dates Measured value		
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	1.5	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	10/3~10/4	0.82	HV
•		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	0.32	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	0.09	HV
Similane 1 Ten.	23	OKI I Vational Field Fain Observatory (Okinosimia Town)	$10/25 \sim 10/26$	0.07	111
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/20 - 10/27$ $10/17 \sim 10/18$	0.69	HV
rinosiiiiia City	24	Timoshinia City Kokutaiji Julioi Tiigii School (Tinoshinia City)	$10/17 \sim 10/18$ $10/18 \sim 10/19$	0.09	11 V
1'D C	25	Y 1'D C 4 11 ('4 CD 11' 11 14 1	10/19~10/20	0.77	107
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	0.77	MV
		Environment (Yamaguchi City)			
	L		0.11.0		
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	0.86	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$	0.71	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	1.6	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	0.31	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	14	HV
		g(	10/5~10/6		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	0.46	MV
Saga I ICI.	31	Saga Trefectural Environmental Research Center (Saga City)	7/2/ 10/4	0.40	1V1 V
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	0.21	HV
Kumamoto Prei.	32	Environmental Science (Udo City)	$11/8 \sim 11/8$ $11/8 \sim 11/9$	0.21	11 V
		Environmental science (Odo City)			
M:1-: P C	22	Minimal: Disformal Line tends for D. 11' T. 14' 1	11/9~11/10	0.26	1.43.7
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	0.26	MV
		Environment (Miyazaki City)			
** 1:	2 :		0.10 ( 0.10 =	2.	****
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	2.4	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	0.11	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) nd: Not detected

#### [1-7-1] 2,2',3,3',4,4',5-Heptachlorobiphenyl (#170) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 34/36 (Missing value: 0)
Detection Frequency (sample): 34/36 (Missing value: 0)

	Aggregated value
Geometric mean	0.04
Median	0.05
Maximum	0.87
Minimum	nd

Local communities	No.	Monitored sites	Warm season		Air sampler
Local communities	INO.		Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	tr(0.01)	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	tr(0.02)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	0.04	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	0.04	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	0.09	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	tr(0.02)	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	0.05	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.08	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	0.07	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	0.25	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	0.03	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.04	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	0.05	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	tr(0.02)	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.14	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	tr(0.01)	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.06	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	0.16	HV

Local communities	No.	Monitored sites	Warm	Air sampler	
	NO.	Wolltored Sites	Sampling dates	Measured value	All sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	0.14	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	0.06	HV
·		(Kobe City)	10/4~10/5		
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	0.03	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	tr(0.01)	HV
		(enmession rem)	$10/25 \sim 10/26$	4(0.01)	
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20^{\circ} 10/27}{10/17 \sim 10/18}$	0.05	HV
Tinosinina City	2-7	Throsinna City Rokaanji Jamoi Tiigii School (Tiirosinna City)	10/18~10/19	0.03	11.4
			$10/19 \sim 10/19$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	0.06	MV
i amaguciii Fici.	23	Environment (Yamaguchi City)	9/13/ 9/20	0.00	IVI V
		Environment (1 amagueni City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	0.10	MV
	20	hagi health and wellare center (hagi city)	9/13/~9/20	0.10	IVI V
T 1 1: D C	27	T 1 1' D C ( 1D 11' II 14 D) (' 1 1	10/24 10/25	0.05	1117
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	0.05	HV
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
	• •		10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	0.13	MV
		Sciences and Public Health (Takamatsu City)			
T1: D 0	20		11/5 11/0	2.22	****
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	0.03	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	0.87	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	0.05	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	tr(0.02)	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	0.03	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	0.16	HV
-		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	tr(0.01)	HV
			9/27~9/28	`	
			9/28~9/29		
		l .	,,	l	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

# $[1\text{-}7\text{-}2]\ 2\text{,}2\text{',}3\text{,}4\text{,}4\text{',}5\text{,}5\text{'-Heptachlorobiphenyl}}\ (\#180)\ /\text{air}\ (pg/m^3)$

Monitored year: 2022

Detection Frequency (site): 35/36 (Missing value: 0)
Detection Frequency (sample): 35/36 (Missing value: 0)

Detection limit : 0.005 Quantification limit : 0.012

	Aggregated value
Geometric mean	0.075
Median	0.071
Maximum	2.5
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	0.017	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
			$10/4 \sim 10/5$ $10/5 \sim 10/6$		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28 9/28~9/29	0.022	HV
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	0.025	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	0.060	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	0.055	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	0.18	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	0.033	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$ \begin{array}{c} 11/8 \sim 11/9 \\ 11/9 \sim 11/10 \\ 11/10 \sim 11/11 \end{array} $	0.085	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.15	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	0.14	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13 9/13~9/14	0.28	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/14 \sim 9/15$ $9/12 \sim 9/13$ $9/13 \sim 9/14$	0.050	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/14 \sim 9/15$ $9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.065	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	0.076	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$   \begin{array}{c}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	0.034	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.27	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	0.022	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.12	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$ \begin{array}{c} 10/11 \sim 10/12 \\ 10/12 \sim 10/13 \\ 10/13 \sim 10/14 \end{array} $	0.31	HV

Local communities	No.	Monitored sites	Warm	Air sampler	
	NO.		Sampling dates	Measured value	All sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	0.27	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	0.13	HV
·		(Kobe City)	$10/4 \sim 10/5$		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	0.042	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	tr(0.011)	HV
		(enmession rem)	$10/25 \sim 10/26$	11(01011)	
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20^{\circ} 10/27}{10/17 \sim 10/18}$	0.092	HV
Tinosinna City	24	Throshina City Rokutaiji Julioi Tiigii School (Tiiroshina City)	10/18~10/19	0.072	11 V
			$\frac{10/18 - 10/19}{10/19 \sim 10/20}$		
V1: D£	25	Yamaguchi Prefectural Institute of Public Health and	$9/13 \sim 9/20$	0.13	MV
Yamaguchi Pref.	23		9/13~9/20	0.13	IVI V
		Environment (Yamaguchi City)			
	26	H : H 14 1W 16 G + (H : G')	0/12 0/20	0.10	107
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	0.18	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	0.11	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	0.28	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	0.053	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	2.5	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	0.066	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	0.030	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	0.036	MV
-		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	0.40	HV
		and Public Health (Kagoshima City)	9/27~9/28		** '
		(Lagorina City)	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	0.019	HV
OKIIIawa 1 ICI.	33	Cape 11000 (Kumgami vinage)	9/27~9/28	0.019	11 V
			9/28~9/29		
			3120, 59129		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

# $\left[1\text{-}7\text{-}3\right]$ 2,3,3',4,4',5,5'-Heptachlorobiphenyl (#189) /air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 12/36 (Missing value: 0)
Detection Frequency (sample): 12/36 (Missing value: 0)

Detection limit : 0.01 Quantification limit : 0.03

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.07
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
TT 11 '1	1	W 7 G 101 G 1B (4.17 G)	Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
11 2		11 7/	10/4~10/5		
			10/5~10/6		
wate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	nd	HV
		suge I in Quarry Memoring Sunten (Tunizawa eng)	9/28~9/29	114	
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$10/24 \sim 10/31$	nd	MV
viryagi i ici.	•	(Sendai City)	10/24 10/31	nu	141 4
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	nd	MV
		City)			
baraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	tr(0.01)	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	tr(0.01)	MV
		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	tr(0.01)	HV
			$11/9 \sim 11/10$		
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute	10/11~10/18	tr(0.01)	MV
•		(Yokohama City)		, ,	
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	0.07	HV
			9/13~9/14		
			9/14~9/15		
shikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	nd	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	nd	HV
		Environment (Kofu City)	9/27~9/28		
		•	9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	11/7~11/14	nd	MV
5		(Nagano City)			
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	nd	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	$10/24 \sim 10/25$	nd	HV
		(Yokkaichi City)	10/25~10/26		
	L		10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	nd	HV
-			9/27~9/28		
			9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	10/11~10/12	tr(0.01)	HV
		Annex (Osaka City)	$10/12 \sim 10/13$	(***-/	

Local communities No. Monitored sites		Monitored sites	Warm	season	Air sampler	
	140.	Wolltored sites	Sampling dates	Measured value	7 tii sampiei	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	tr(0.01)	HV	
			9/27~9/28			
			9/28~9/29			
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV	
•		(Kobe City)	10/4~10/5			
			$10/5 \sim 10/6$			
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV	
			10/25~10/26			
			10/26~10/27			
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV	
		(	$10/25 \sim 10/26$			
			$10/26 \sim 10/27$			
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/17 \sim 10/18$	nd	HV	
Tinosinina City		Throsimia city reacailt value riigh seneer (riirosimia city)	10/18~10/19	ii d	11 (	
			$10/19 \sim 10/20$			
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV	
i amaguciii Fici.	23	Environment (Yamaguchi City)	9/13/ 9/20	IIG	IVI V	
		Environment (1 amagueni City)				
	26	Heai Health and Walfons Contan (Heai City)	9/13~9/20	nd	MV	
	20	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	na	IVI V	
T 1 1: D 6	27	The state of the s	10/24 10/25	1	****	
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	nd	HV	
		Environmental Sciences Center (Tokushima City)	10/25~10/26			
			10/26~10/27			
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	tr(0.01)	MV	
		Sciences and Public Health (Takamatsu City)				
			11.5			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV	
		(Uwajima City)	11/8~11/9			
			11/9~11/10			
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	tr(0.02)	HV	
			$10/5 \sim 10/6$			
			$10/6 \sim 10/7$			
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	tr(0.01)	MV	
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	tr(0.01)	HV	
		Environmental Science (Udo City)	11/8~11/9			
			11/9~11/10			
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV	
*		Environment (Miyazaki City)				
		, , ,				
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	tr(0.01)	HV	
3	1	and Public Health (Kagoshima City)	9/27~9/28	()		
			9/28~9/29			
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV	
	33	Capt 11000 (Italiagain + mage)	9/27~9/28	110	11.1	
			9/28~9/29			
	1		7120 T7127			

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

## [1-8] Octachlorobiphenyls/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 22/36 (Missing value: 0)
Detection Frequency (sample): 22/36 (Missing value: 0)

Detection limit : 0.05 Quantification limit : 0.13

	Aggregated value
Geometric mean	tr(0.07)
Median	tr(0.06)
Maximum	1.6
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
	-	W 3 O 101 C ( 1B ( 4 13 C) )	Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
			10/4~10/5		
Iwate Pref.	3	Suga Air Quality Manitoning Station (Talvigayya City)	$10/5 \sim 10/6$ $9/27 \sim 9/28$		HV
iwate Prei.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/28~9/29	nd	ПV
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	tr(0.05)	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	tr(0.06)	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	0.15	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9 11/9~11/10 11/10~11/11	tr(0.08)	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	tr(0.09)	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	tr(0.11)	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13 9/13~9/14	0.42	HV
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/12~9/13 9/13~9/14	nd	HV
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	tr(0.06)	HV
		Environment (Kofu City)	9/27~9/28 9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	tr(0.06)	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	$\frac{10/26 \sim 10/27}{10/4 \sim 10/11}$	0.15	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$	nd	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$   \begin{array}{r}     10/26 \sim 10/27 \\     9/26 \sim 9/27 \\     9/27 \sim 9/28 \\     9/28 \sim 9/29   \end{array} $	tr(0.08)	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$\frac{9/28 \sim 9/29}{10/11 \sim 10/12}$ $\frac{10/12 \sim 10/13}{10/12 \sim 10/13}$	0.20	HV
			10/13~10/14		

Local communities	No.	Monitored sites	Warm	season	Air sampler
	110.		Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	0.18	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	tr(0.08)	HV
		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26	1	
			10/26~10/27	1	
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
		, , , , , , , , , , , , , , , , , , , ,	10/25~10/26		
			10/26~10/27		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	tr(0.07)	HV
,		, , :g.: ( (	10/18~10/19	(- *-)	
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	tr(0.09)	MV
1 unuguen 1 1 un		Environment (Yamaguchi City)	y/15 y/20	4(0.05)	1,1
		Zivinomion (1 umagavin etty)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	tr(0.11)	MV
	20	Traditional worker content (Tradit City)	J/15 J/20	4(0.11)	111 1
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	tr(0.07)	HV
i okusiiiiia i ici.	21	Environmental Sciences Center (Tokushima City)	10/24 - 10/25 $10/25 \sim 10/26$	11(0.07)	11 V
		Environmental Sciences Center (Tokushima City)	$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	0.18	MV
Kagawa Fici.	20	Sciences and Public Health (Takamatsu City)	9/27 10/4	0.16	IVI V
		Sciences and I done Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
Ellillic I ICI.	2)	(Uwajima City)	11/8~11/9	na na	11 V
		(Owajima City)	11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	1.6	HV
rukuoka 11ci.	30	Official City Government Building (Official City)	10/4 - 10/3 $10/5 \sim 10/6$	1.0	11 V
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$10/6 \sim 10/7$ $9/27 \sim 10/4$	tr(0.07)	MV
Saga Prei.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27 ~ 10/4	u(0.07)	IVI V
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
Kumamoto Pici.	32	Environmental Science (Udo City)	$11/7 \sim 11/8$ $11/8 \sim 11/9$	na	11 V
		Environmental Science (Odo City)			
Missogalsi Duof	22	Micrografic Duefootswal Institute for Dublic Healths: 1	11/9~11/10	n d	MV
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	nd	IVI V
		Environment (Miyazaki City)			
V1-: P. C	2.4	Variation Destructional Legislate C. D. 1	0/26 - 0/27	0.20	717.7
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	0.29	HV
		and Public Health (Kagoshima City)	9/27~9/28		
o1: P 0	2.5		9/28~9/29		****
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28		
			$9/28 \sim 9/29$		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

## [1-9] Nonachlorobiphenyls/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 17/36 (Missing value: 0)
Detection Frequency (sample): 17/36 (Missing value: 0)

Detection limit : 0.02 Quantification limit : 0.05

	Aggregated value
Geometric mean	tr(0.02)
Median	nd
Maximum	0.20
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
Local communities	110.		Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	tr(0.02)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	tr(0.02)	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	tr(0.04)	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	tr(0.02)	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	tr(0.02)	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	tr(0.02)	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	0.20	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	tr(0.02)	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	nd	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	nd	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	tr(0.02)	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{c}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	nd	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	nd	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	tr(0.03)	HV

No. 20	Monitored sites	Sampling dates	Measured value	Air sampler
20				
20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	tr(0.02)	HV
		9/27~9/28		
		9/28~9/29		
21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV
	(Kobe City)	$10/4 \sim 10/5$		
	` '			
22	Tenri Air Quality Monitoring Station (Tenri City)		nd	HV
	( ()			
23	Oki National Acid Rain Observatory (Okinoshima Town)		nd	HV
23	OKI I tational / tela italii Observatory (Okinosiinia Town)		na	111
2.4	Him time City V days iii Innie High Colool (Him time City)		1	HV
24	Hirosnima City Kokutaiji Junior High School (Hirosnima City)		na	ΗV
			(0.00)	
		$9/13 \sim 9/20$	tr(0.02)	MV
	Environment (Yamaguchi City)			
26	Hagi Health and Welfare Center (Hagi City)	$9/13 \sim 9/20$	nd	MV
	· · · · · · · · · · · · · · · · · · ·		nd	HV
	Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
		$10/26 \sim 10/27$		
28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	tr(0.02)	MV
	Sciences and Public Health (Takamatsu City)			
29	Ehime Prefectural Government Nanyo Regional Office	$11/7 \sim 11/8$	nd	HV
	(Uwajima City)	11/8~11/9		
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
30	Omuta City Government Building (Omuta City)		0.07	HV
,,	omata only deverament Banding (omata only)		0.07	11 1
3.1	Saga Prefectural Environmental Research Center (Saga City)		tr(0.02)	MV
31	Saga i refectural Environmental Research Center (Saga City)	9/2/ -10/4	u(0.02)	1 <b>V1 V</b>
32	Kumamata Prafactural Institute of Public Health and	11/7~11/8	tr(0.02)	HV
_			11(0.02)	11 V
	Environmental Science (Odo City)			
2.2	Missaali Deefertaan Leefert for D. 11' 17 - 14 - 1		1	107
	, and the second	10/11~10/18	nd	MV
	Environment (Miyazaki City)			
2.4	77 11 2 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.10.6	(0.6.1)	
	•		tr(0.04)	HV
	and Public Health (Kagoshima City)			
		9/28~9/29		
35	Cape Hedo (Kunigami Village)	$9/26 \sim 9/27$	nd	HV
33	cupe freue (realigaini vinage)	70 71	J	
33	cupe frede (rumgum v mage)	9/27~9/28		
2 2 2 3 3 3 3	222 23 24 25 26 27 28 29 30 31	(Kobe City)  Tenri Air Quality Monitoring Station (Tenri City)  Oki National Acid Rain Observatory (Okinoshima Town)  Hiroshima City Kokutaiji Junior High School (Hiroshima City)  Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)  Hagi Health and Welfare Center (Hagi City)  Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)  Kagawa Prefectural Research Institute for Environmental Sciences and Public Health (Takamatsu City)  Hime Prefectural Government Nanyo Regional Office (Uwajima City)  Omuta City Government Building (Omuta City)  Saga Prefectural Environmental Research Center (Saga City)  Kumamoto Prefectural Institute of Public Health and Environmental Science (Udo City)  Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)	Kobe City Institute of Health and Environmental Sciences   $10/3 \sim 10/4 \times 10/5 \times 10/6 \times 10/5 \sim 10/6 \times 10/5 \sim 10/6 \times 10/25 \sim 10/26 \sim$	Robe City Institute of Health and Environmental Sciences

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

## [1-10] Decachlorobiphenyl/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 29/36 (Missing value: 0)
Detection Frequency (sample): 29/36 (Missing value: 0)

Detection limit : 0.01 Quantification limit : 0.03

	Aggregated value
Geometric mean	tr(0.01)
Median	tr(0.01)
Maximum	0.08
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	tr(0.01)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
11 7			10/4~10/5		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	tr(0.01)	HV
		sugerin Quanty Memoring Sunten (Tunizawa eng)	9/28~9/29	4(0.01)	
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$10/24 \sim 10/31$	tr(0.01)	MV
viryagi i ici.	~	(Sendai City)	10/24 10/31	u(0.01)	1V1 V
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	tr(0.02)	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	tr(0.02)	MV
		City)		, ,	
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	0.04	MV
ronyo wee.	,	Protection (Koto Ward)	10/17 10/21	0.01	171 7
	0	GI:1::: 11 1/0 Y''II )	11/0 11/15	tr(0.01)	107
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	tr(0.01)	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	0.04	HV
Xanagawa 11ci.		Kanagawa Environmentai Research Center (Tinatsuka City)	11/9~11/10	0.04	11 V
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute	10/11~10/18	tr(0.02)	MV
токоната Спу	10	(Yokohama City)	10/11 - 10/18	u(0.02)	1V1 V
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	tr(0.02)	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	0.08	HV
			9/13~9/14		
			9/14~9/15		
shikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	tr(0.01)	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	tr(0.02)	HV
		Environment (Kofu City)	9/27~9/28		
			9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	11/7~11/14	tr(0.01)	MV
		(Nagano City)			
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	tr(0.01)	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	tr(0.01)	HV
		(Yokkaichi City)	10/25~10/26		
	<u>L</u>		10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	tr(0.01)	HV
			9/27~9/28		
			9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	10/11~10/12	tr(0.01)	HV
		Annex (Osaka City)	10/12~10/13	` ′	
		1 × × × × × × × × × × × × × × × × × × ×	10/13~10/14		

ocal communities	Monitored sites	arm season Air sampler
	Sampling da	res Measured value Air sampler
yogo Pref.	Prefectural Environmental Research Center (Kobe City) 9/26~9/2	7 tr(0.01) HV
	9/27~9/2	3
	9/28~9/2	,
obe City	City Institute of Health and Environmental Sciences 10/3~10/	tr(0.01) HV
	City) $10/4 \sim 10/4$	· · · · · · · · · · · · · · · · · · ·
	10/5~10/	<u> </u>
ara Pref.	Air Quality Monitoring Station (Tenri City) 10/24~10/	
	10/25~10/	
	10/26~10/	
nimane Pref.	ational Acid Rain Observatory (Okinoshima Town) 10/24~10/	
innane i iei.	$\frac{10/25 \sim 10}{10/25 \sim 10}$	
	$\frac{10/25 - 10}{10/26 \sim 10}$	
iroshima City	ima City Kokutaiji Junior High School (Hiroshima City) 10/17~10/	
irosiiiiia City	inia City Kokutaiji Julioi Trigii School (Triosiniia City) $10/17 - 10/10$ $10/18 \sim 10/10$	
1:D C	200 200 200 200 200 200 200 200 200 200	
amaguchi Pref.		tr(0.01) MV
	nment (Yamaguchi City)	
	Health and Welfare Center (Hagi City) $9/13 \sim 9/2$	tr(0.01) MV
okushima Pref.	hima Prefectural Public Health, Pharmaceutical and 10/24~10	
	nmental Sciences Center (Tokushima City) 10/25~10/	2.6
	10/26~10	27
agawa Pref.	va Prefectural Research Institute for Environmental $9/27 \sim 10$	tr(0.01) MV
	es and Public Health (Takamatsu City)	
nime Pref.	Prefectural Government Nanyo Regional Office 11/7~11/	3 nd HV
	ima City) 11/8~11/	)
	11/9~11/	
ıkuoka Pref.	City Government Building (Omuta City) 10/4~10/	
	10/5~10/	
	10/6~10/	
nga Pref.	refectural Environmental Research Center (Saga City) 9/27~10	
igu i ioi.	Telestatal Environmental resourch center (Suga City)	1411
umamoto Pref	moto Prefectural Institute of Public Health and	3 tr(0.02) HV
amamoto I ICI.		
izrogalci Duof		
iyazaki Prei.		6 Ir(0.01) MV
	mnent (ivnyazaki City)	
1: 5 0	D. C. L. M. C. D. L. L. D. L. C. D. L.	
agoshima Pref.	Annana manana	
kinawa Pref.		
	9/27~9/2	
	9/28~9/2	)
umamoto Pref.  liyazaki Pref.  agoshima Pref.  kinawa Pref.		0 0 8 tr(0.01) M 7 nd H 8 7 nd H 8 7 nd H

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

# [2] HCB (Hexachlorobenzene) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit : 0.04 Quantification limit : 0.09

	Aggregated value
Geometric mean	100
Median	99
Maximum	140
Minimum	71

Local communities	No.	Monitored sites	Warm		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	76	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	80	HV
11 2			10/4~10/5		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	89	HV
			9/28~9/29		
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	74	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	110	MV
C		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	120	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	100	MV
		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	110	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	92	HV
			11/9~11/10		
			$11/10 \sim 11/11$		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	120	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	110	HV
			9/27~9/28		
			9/28~9/29		
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	140	HV
			9/13~9/14		
			9/14~9/15		
shikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	110	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
1:5.0		TY 12 D 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9/14~9/15	1.10	****
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	140	HV
		Environment (Kofu City)	9/27~9/28		
V D£	1.5	Nagano Environmental Conservation Research Institute	9/28~9/29	0.0	N07
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	89	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	72	HV
		Environmental Sciences (Kakamigahara City)	$10/25 \sim 10/26$		
		(	$10/26 \sim 10/27$		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	98	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	78	HV
		(Yokkaichi City)	10/25~10/26		
			10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	120	HV
			9/27~9/28		
	<u> </u>		9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	10/11~10/12	98	HV
		Annex (Osaka City)	10/12~10/13		
	l		10/13~10/14		

Local communities	No.	Monitored sites	Warm	season	Air sampler
	140.		Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	110	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	97	HV
		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	73	HV
			10/25~10/26	Ì	
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	71	HV
		, (	10/25~10/26	, -	
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20^{\circ} 10/27}{10/17 \sim 10/18}$	92	HV
III John City	~	The second of the second second (1111001111111111111111111111111111111	10/18~10/19	'-	11 7
			$10/19 \sim 10/19$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	130	MV
i amagucini Frei.	23	Environment (Yamaguchi City)	9/13/ - 9/20	130	IVI V
	26	W. W. M. Living Co. (W. 16%)	0/12 0/20	120	
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	130	MV
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	79	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$	, ,	
		Zinvinoimianiai soisiises soiniei (Toinasiimiai sing)	$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	130	MV
Kagawa 1 ICI.	20	Sciences and Public Health (Takamatsu City)	<i>7121</i> 10/4	150	1V1 V
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	93	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	110	HV
			$10/5 \sim 10/6$		
			10/6~10/7		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	110	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	89	HV
xumamoto Prei.	32		$11/7 \sim 11/8$ $11/8 \sim 11/9$	07	11 V
		Environmental Science (Udo City)			
Mi1-i P. C	22	Ministration I Description I Description of Description I	11/9~11/10	96	107
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)	10/11~10/18	86	MV
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	130	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29	1	
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	110	HV
			9/27~9/28	1	
			9/28~9/29	1	
	l		9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

# [11-1] $\alpha$ -HCH /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit : 0.04 Quantification limit : 0.10

	Aggregated value
Geometric mean	16
Median	16
Maximum	300
Minimum	2.9

Local communities	No.	Monitored sites	Warm		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	8.5	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	6.8	HV
11 ,			10/4~10/5		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	8.5	HV
			9/28~9/29		
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	6.5	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	16	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	21	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	200	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	300	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	8.2	HV
ranagawa 1101.	_	Training awa Environmental resourch Center (Titutisaka City)	$11/9 \sim 11/10$	0.2	11 1
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute	10/11~10/18	13	MV
		(Yokohama City)			
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	26	HV
			9/27~9/28		
			9/28~9/29		
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	35	HV
			9/13~9/14		
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	18	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
	L		9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	22	HV
		Environment (Kofu City)	9/27~9/28		
n D C	1.5	N. P. A. C. P. A. L. C.	9/28~9/29	12	107
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	13	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	7.5	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	18	MV
Mia Drof	10	Mis Brofastyna Haalth and Environment Describ Lind's	10/24 ~ . 10/25	6.1	1137
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$\frac{10/24 \sim 10/25}{10/25 \sim 10/26}$	6.1	HV
			$10/26 \sim 10/27$		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$	26	HV
y		,	9/27~9/28		
			9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	$10/11 \sim 10/12$	17	HV
	1 -	Annex (Osaka City)	$10/11 \sim 10/12$	- /	
		IAnnex (Osaka City)	10/1/20010/13		

Local communities	No. Monitored sites		Warm season		Air sampler
Local communities	INU.	MOUNTOI CO SILES	Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	19	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	10/3~10/4	9.0	HV
•		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	21	HV
		\$ \tag{7}	10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	4.5	HV
		, (	10/25~10/26		
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20}{10/17} \sim 10/18$	11	HV
III John City		Timosinina City ixokumiji sumoi riigii school (rinosinina City)	10/18~10/19	11	11 4
			$10/19 \sim 10/19$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	34	MV
i amaguciii Prei.	23	Environment (Yamaguchi City)	9/13/~9/20	34	IVI V
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	26	MV
	20	Tragi Treatar and Westare Center (Tragi City)	7/13 7/20	20	141 4
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	7.0	HV
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	19	MV
5		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	11	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	100	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	23	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	11	HV
zamamow i ici.	52	Environmental Science (Udo City)	11/8~11/9	11	11 4
		Environmental Science (Odo City)	11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	6.4	MV
инуагакі Ртеі.	33	Environment (Miyazaki City)	10/11 ~ 10/18	0.4	IVI V
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	17	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29	1	
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	2.9	HV
	1			i I	
			$9/27 \sim 9/28$	l l	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

# [11-2] $\beta$ -HCH /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit : 0.03 Quantification limit : 0.07

	Aggregated value
Geometric mean	1.8
Median	1.9
Maximum	14
Minimum	0.23

Local communities	No.	Monitored sites	Warms		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	1.9	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	0.36	HV
11 ,			10/4~10/5		
			10/5~10/6		
wate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	0.49	HV
			9/28~9/29 9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$\frac{9/29 \cdot 9/30}{10/24 \sim 10/31}$	0.65	MV
viryagi i ici.		(Sendai City)	10/24 10/31	0.03	1V1 V
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	1.3	MV
8		City)			
baraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	1.4	MV
		City)			
Γokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	1.8	MV
		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	2.5	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	1.3	HV
-			11/9~11/10		
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	1.6	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	3.5	HV
			9/27~9/28		
			9/28~9/29		
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12\sim9/13$ $9/13\sim9/14$	10	HV
			9/13/09/14		
shikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	2.6	HV
	10	Environmental Science (Kanazawa City)	9/13~9/14	2.0	
		`	9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	5.2	HV
		Environment (Kofu City)	9/27~9/28		
			9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	1.4	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	0.67	HV
	-	Environmental Sciences (Kakamigahara City)	$10/25 \sim 10/26$		
		, , ,	10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	2.9	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	0.37	HV
	10	(Yokkaichi City)	10/25~10/26	0.57	11 1
7 . P. C	10	W D. C W. C W. C	10/26~10/27		****
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	5.2	HV
			$9/27 \sim 9/28$		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	$9/28 \sim 9/29$ $10/11 \sim 10/12$	4.3	HV
Jouna 1 101.	19	Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$	7.5	11 4
	ĺ	, , , , , , , , , , , , , , , , , , ,	$10/12 - 10/13$ $10/13 \sim 10/14$		

Local communities	No.	Monitored sites		season	Air sampler
Local communities	INO.	Monitored sites	Sampling dates	Measured value	All Sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	3.8	HV
			9/27~9/28	1	
			9/28~9/29	1	
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	10/3~10/4	1.9	HV
		(Kobe City)	10/4~10/5		
		(,)	10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	3.5	HV
vara i ici.		Tenit 7th Quanty Montoring Station (Tenit City)	$10/25 \sim 10/26$	3.5	111
			$10/26 \sim 10/27$		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$10/20 - 10/27$ $10/24 \sim 10/25$	0.23	HV
ommane i ici.	23	Oki National Acid Rain Observatory (Okinosinina Town)		0.23	11 V
			10/25~10/26	-	
T: 1: C:	2.4	H. I. C. KI C. H. C. H. I. C.	10/26~10/27	1.0	****
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	1.9	HV
			10/18~10/19		
			10/19~10/20		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	9/13~9/20	6.3	MV
		, C			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	6.5	MV
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	0.84	HV
okushina Prei.	21	*		0.84	пν
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
r D 0	20	Tr. D. C. and Tr. C. C. D. C. and Tr. C. C. D. C. and Tr. C. C. D. C. and Tr. C. D. C. D. C. and Tr. C. D. C. D. C. and Tr. C. D. C.	10/26~10/27	2.0	
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental Sciences and Public Health (Takamatsu City)	9/27~10/4	3.8	MV
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	1.4	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10	1	
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	14	HV
			$10/5 \sim 10/6$		
			10/6~10/7		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	3.5	MV
Kumamoto Pref.	22	Version A. Durfort and Line Co. 11. H. 14.	11/7 - 11/0	1.3	HV
Sumamoto Pret.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	1.5	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)	10/11~10/18	0.59	MV
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	3.1	HV
-		and Public Health (Kagoshima City)	9/27~9/28	1	
		` ` ` '/	9/28~9/29	1	
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	0.42	HV
		Cap 11200 (Rumgum + mage)	9/27~9/28	0.72	11 7
			9/28~9/29	1	
			9/20, ~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

## [11-3] $\gamma$ -HCH (synonym: Lindane) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit : 0.03 Quantification limit : 0.09

	Aggregated value
Geometric mean	5.8
Median	5.9
Maximum	120
Minimum	0.63

Local communities	No.	Monitored sites		season	Air sampler
Local communities	INO.	Wollitored sites	Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	1.9	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$   \begin{array}{c}     10/3 \sim 10/4 \\     10/4 \sim 10/5 \\     10/5 \sim 10/6   \end{array} $	1.5	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	2.2	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	2.0	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	5.9	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	6.9	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	60	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	120	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	3.7	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	5.8	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	10	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	15	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	6.4	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	8.6	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	4.6	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	2.5	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	5.9	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	1.5	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	8.9	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	7.1	HV

Local communities	No	No. Monitored sites	Warm	Air sampler	
	110.		Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	11	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	4.4	HV
·		(Kobe City)	10/4~10/5		
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	9.1	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	1.1	HV
Similane 1 Ten.	23	OKI I Vational Field Fain Observatory (Okinosimia Town)	$10/25 \sim 10/26$	1.1	11 (
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	3.7	HV
rinosiiina City	24	Timoshinia City Kokutaiji Julioi Tiigii School (Tinoshinia City)	10/18~10/18	3.7	11 V
1'D C	25	Y 1'D C 4 11 ('4 CD 11' 11 14 1	10/19~10/20	21	1.07
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	21	MV
		Environment (Yamaguchi City)			
	L		0.11.0		
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	21	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$	3.9	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	9.2	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	4.2	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	22	HV
		g(	10/5~10/6		
			10/6~10/7		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	11	MV
Sugu i ici.	31	Sugu i refecturar Environmentar researen center (sugu city)	7/27 10/1	11	111 1
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	3.2	HV
ixamamoto I ICI.	32	Environmental Science (Udo City)	11/8~11/9	3.2	11 V
		Environmental science (odo city)			
Missagalsi D£	22	Miyogolyi Duofaatamal Instituta fee Deddie II - 14 1	11/9~11/10	2.1	M37
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	2.1	MV
		Environment (Miyazaki City)			
T/ 1' 7 0	2.	W. I. D. C. II day 0. T. I.	0/06 0/07		****
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	6.2	HV
		and Public Health (Kagoshima City)	9/27~9/28		
	<u> </u>		9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	0.63	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

# [11-4] $\delta$ -HCH /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 34/36 (Missing value: 0)
Detection Frequency (sample): 34/36 (Missing value: 0)

Detection limit : 0.03 Quantification limit : 0.08

	Aggregated value
Geometric mean	0.58
Median	0.67
Maximum	12
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates		Air sampler
			Sampling dates	Measured value	-
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	0.36	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	0.10	HV
			10/4~10/5		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	0.27	HV
			9/28~9/29		
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	0.27	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	0.57	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	1.1	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	0.71	MV
-		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	1.2	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	0.44	HV
Ü			11/9~11/10		
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.52	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	1.8	HV
			9/27~9/28		
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	3.8	HV
Ž			9/13~9/14		
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	0.98	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
	L	<u> </u>	9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	1.0	HV
		Environment (Kofu City)	9/27~9/28		
			9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	0.58	MV
			10.00		
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	0.24	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
			$10/26 \sim 10/27$		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.68	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	0.14	HV
IVIIC I ICI.	10	(Yokkaichi City)	$\frac{10/24 \times 10/23}{10/25 \sim 10/26}$	0.14	п٧
		(TOKKAIOIII CITY)	$10/25 \sim 10/26$ $10/26 \sim 10/27$		
Kyoto Prif.	10	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 10/27$	1.6	HV
KYOW FIII.	19	Kyoto Fretecture Joyo Senior riigh School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$	1.0	п٧
			$9/27 \sim 9/28$ $9/28 \sim 9/29$		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	$\frac{9/28 \sim 9/29}{10/11 \sim 10/12}$	0.84	HV
Osaka Piel.	19	Annex (Osaka City)	$\frac{10/11\sim10/12}{10/12\sim10/13}$	0.84	пv
		ZIIIICA (OSAKA CILY)			
			$10/13 \sim 10/14$		

Local communities	No	No. Monitored sites	Warm	Air sampler	
	140.		Sampling dates	Measured value	7 tii Sampiei
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	$9/26 \sim 9/27$	0.97	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	0.38	HV
•		(Kobe City)	$10/4 \sim 10/5$		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	1.1	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$10/24 \sim 10/25$	nd	HV
		(enmessing revis)	$10/25 \sim 10/26$	11.0	
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20^{\circ} 10/27}{10/17 \sim 10/18}$	0.32	HV
Tinosiiiia City	24	Throshina City Kokutaiji Junioi Trigii School (Throshina City)	10/18~10/19	0.52	11 V
			$10/18 \sim 10/19$ $10/19 \sim 10/20$		
Vomograhi Deef	25	Yamaguchi Prefectural Institute of Public Health and	$9/13 \sim 9/20$	1.2	MV
Yamaguchi Pref.	23		9/13/~9/20	1.2	IVI V
		Environment (Yamaguchi City)			
	26	H :H 14 1W10 C + (H :C:()	9/13~9/20	1.6	1477
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	1.6	MV
T 1 1' D C	27	The state of the s	10/24 10/25	0.20	****
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	0.28	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	1.1	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	0.66	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	12	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	2.0	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	0.39	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	0.30	MV
•		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	3.0	HV
		and Public Health (Kagoshima City)	9/27~9/28	5.0	
		(Lagosania City)	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
OKIIIAWA I ICI.	33	Cape 11000 (Kumgami v mage)	9/27~9/28	nu	11 V
			9/28~9/29		
	<u> </u>		9120 9129		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) nd: Not detected

# [14] Polybromodiphenyl ethers(Br<sub>4</sub>~Br<sub>10</sub>) /air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 28/36 (Missing value: 0)
Detection Frequency (sample): 28/36 (Missing value: 0)

Detection limit: \*1.4 Quantification limit: \*3.5

	Aggregated value
Geometric mean	tr(2.5)
Median	tr(2.0)
Maximum	17
Minimum	nd

Local communities	No.	Monitored sites	Warm	Air sampler	
Local communities	No.	Monitored sites	Sampling dates	Measured value	Air sampier
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$   \begin{array}{c}     10/3 \sim 10/4 \\     10/4 \sim 10/5 \\     10/5 \sim 10/6   \end{array} $	tr(2.0)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	tr(2.8)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	tr(1.8)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	tr(3.4)	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	6.7	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9 11/9~11/10 11/10~11/11	14	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	5.2	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	tr(1.6)	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	tr(1.8)	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	7.9	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	4.5	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	17	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	tr(3.0)	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	tr(1.9)	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27 9/27~9/28 9/28~9/29	6.4	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$ \begin{array}{c} 10/11 \sim 10/12 \\ 10/12 \sim 10/13 \\ 10/13 \sim 10/14 \end{array} $	6.4	HV

Local communities	No.	Monitored sites	Warm season		Air sampler
Local communities	110.		Sampling dates	Measured value	•
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	tr(1.6)	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	tr(3.0)	HV
		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	tr(1.6)	HV
			10/25~10/26	ì í	
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27	1	
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	4.4	HV
III John City		The second of the second second (1111001111111111111111111111111111111	10/18~10/19		11 7
			$10/19 \sim 10/19$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	tr(1.7)	MV
i amaguem i iei.	23	Environment (Yamaguchi City)	9/13 - 9/20	u(1.7)	IVI V
		Environment (Tuninguem City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	tr(1.9)	MV
	20	Tragi Treatur and Wertare Center (Tragi City)	7/13 7/20	u(1.5)	141 4
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	tr(1.7)	HV
i okusiiiiia i ici.	21	Environmental Sciences Center (Tokushima City)	10/24 - 10/25 $10/25 \sim 10/26$	u(1.7)	11 V
		Environmental Sciences Center (Tokusinina City)	$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	6.6	MV
Kagawa Prei.	20	Sciences and Public Health (Takamatsu City)	9/27 ~ 10/4	0.0	IVI V
		Sciences and Fublic Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	11	HV
Simile I ICI.	23	(Uwajima City)	11/8~11/8	11	11 V
		(Owajima City)	11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	15	HV
rukuoka Prei.	30	Omuta City Government Building (Omuta City)		13	пν
			10/5~10/6		
7 D C	2.1		10/6~10/7	,	107
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	nd	MV
7 . D.C	22	W D. C 11 C CD 11 W 11 1	11/7 11/0	. (2.0)	****
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	tr(2.0)	HV
		Environmental Science (Udo City)	11/8~11/9		
	2.		11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	nd	MV
		Environment (Miyazaki City)			
	2 :		0/0/ 0/0-	. (4.6)	<b>,</b>
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	tr(1.8)	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

<sup>(</sup>Note 6) \*: Indicates the sum value of the Quantification [Detection] limits of each congeners.

## [14-1] Tetrabromodiphenyl ethers /air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 20/36 (Missing value: 0)
Detection Frequency (sample): 20/36 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.6

	Aggregated value
Geometric mean	tr(0.2)
Median	tr(0.2)
Maximum	1.1
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
			$10/4 \sim 10/5$ $10/5 \sim 10/6$		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28 9/28~9/29	tr(0.3)	HV
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	tr(0.2)	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	tr(0.5)	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	tr(0.3)	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	0.6	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.7	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	tr(0.4)	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	tr(0.2)	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	tr(0.4)	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	tr(0.4)	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	nd	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	nd	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	1.1	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	nd	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	tr(0.2)	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$ \begin{array}{c} 10/11 \sim 10/12 \\ 10/12 \sim 10/13 \\ 10/13 \sim 10/14 \end{array} $	tr(0.3)	HV

Local communities	No.	Monitored sites	Warm	Air campler		
	110.	iviointoled sites	Sampling dates	Measured value	Air sampler	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	tr(0.5)	HV	
			9/27~9/28			
			9/28~9/29			
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	tr(0.2)	HV	
•		(Kobe City)	$10/4 \sim 10/5$	, ,		
			10/5~10/6			
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV	
		Tomit in Quanty Homering States (Tomit City)	$10/25 \sim 10/26$	11.0		
			$10/26 \sim 10/27$			
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$\frac{10/26 - 10/27}{10/24 \sim 10/25}$	nd	HV	
Similarie I Ter.	23	Oki i vationai 7 teia ivam Observatory (Okinosimia 10wii)	$10/25 \sim 10/26$	na	11 4	
			$10/26 \sim 10/20$			
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/26 \sim 10/27$ $10/17 \sim 10/18$	1	HV	
Hirosnima City	24	Hirosnima City Kokutaiji Junior High School (Hirosnima City)		nd	ΗV	
			10/18~10/19			
			10/19~10/20	(0.0)		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	tr(0.3)	MV	
		Environment (Yamaguchi City)				
	26	Hagi Health and Welfare Center (Hagi City)	$9/13\sim 9/20$	tr(0.2)	MV	
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$	nd	HV	
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$			
			$10/26 \sim 10/27$			
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	tr(0.2)	MV	
		Sciences and Public Health (Takamatsu City)				
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	$11/7 \sim 11/8$	nd	HV	
		(Uwajima City)	11/8~11/9			
			11/9~11/10			
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	tr(0.3)	HV	
ukuoku 1101.	50	omata city devermient banding (omata city)	$10/5 \sim 10/6$	4(0.5)	11.	
			$10/6 \sim 10/7$			
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	nd	MV	
Saga I ICI.	31	Saga i refectural Environmental Research Center (Saga City)	9/2/ -10/4	na	1 <b>V1 V</b>	
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV	
Kumamoto fici.	32	Environmental Science (Udo City)	11/8~11/9	IIU	11 V	
		Environmental Science (Odo City)				
1:P 0	22	Art 1:D C + 11 C + C D 12 Y	11/9~11/10			
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	nd	MV	
		Environment (Miyazaki City)				
	L		0.10.2	10.5		
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	tr(0.2)	HV	
		and Public Health (Kagoshima City)	9/27~9/28			
			9/28~9/29			
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV	
			9/27~9/28			
			9/28~9/29			
	•	•				

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

## [14-1-1] 2,2',4,4'-Tetrabromodiphenyl ether (#47) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 35/36 (Missing value: 0)
Detection Frequency (sample): 35/36 (Missing value: 0)

Detection limit : 0.02 Quantification limit : 0.05

	Aggregated value
Geometric mean	0.11
Median	0.14
Maximum	0.86
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
** 11 '1		W. T. G. 101 0 1D (117 0)	Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	tr(0.03)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	0.07	HV
			10/4~10/5		
T . D C	2		10/5~10/6	0.20	****
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	0.28	HV
			9/28~9/29		
			9/29~9/30	(0.04)	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	tr(0.04)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	tr(0.04)	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	0.14	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	0.35	MV
		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	0.16	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	0.48	HV
	´	Tamaga a Environmental research content (Tinasaka City)	11/9~11/10	0.10	11 1
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute	10/11~10/18	0.40	MV
		(Yokohama City)	10/10		211 1
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	0.26	HV
			9/27~9/28		
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	0.12	HV
			9/13~9/14		
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	0.30	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	0.19	HV
		Environment (Kofu City)	9/27~9/28		
			9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	$11/7 \sim 11/14$	tr(0.04)	MV
		(Nagano City)			
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	0.06	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.86	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	tr(0.03)	HV
		(Yokkaichi City)	10/25~10/26		
	L		10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	0.17	HV
			9/27~9/28		
			9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	10/11~10/12	0.17	HV
		Annex (Osaka City)	10/12~10/13		
	1	1	10/13~10/14		

Local communities	No.	Monitored sites	Warm	season	Air sampler
	INO.	Wolltored Sites	Sampling dates Measured value		Air sampier
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	0.33	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	0.18	HV
·		(Kobe City)	$10/4 \sim 10/5$		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	$10/24 \sim 10/25$	0.08	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$10/24 \sim 10/25$	tr(0.02)	HV
		(enmessing revis)	$10/25 \sim 10/26$	4(0:02)	
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20^{\circ} 10/27}{10/17 \sim 10/18}$	0.07	HV
Tinosiiiia City	24	Throshina City Rokutaiji Julioi Tiigii School (Tiiroshina City)	10/18~10/19	0.07	11 V
			$\frac{10/18 - 10/19}{10/19 \sim 10/20}$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	$9/13 \sim 9/20$	0.17	MV
i amaguem riel.	23	Environment (Yamaguchi City)	3/13 - 3/20	0.17	1V1 V
		Environment (1 amagueni City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	0.15	MV
	20	hagi health and wellare center (hagi city)	9/13/~9/20	0.13	IVI V
T. 1	27	The state of the s	10/24 10/25	0.00	****
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	0.08	HV
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	0.18	MV
		Sciences and Public Health (Takamatsu City)			
			11.5		
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	0.07	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	0.24	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	0.14	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	0.05	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	0.05	MV
-		Environment (Miyazaki City)			
		, , ,			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	0.17	HV
3		and Public Health (Kagoshima City)	9/27~9/28		
		( <b>g</b> 5 <b>.</b> 7)	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
Okinawa 1101.		cupe frede (framgain + mage)	9/27~9/28	IIG	11 4
			9/28~9/29		
			3140 - 3149		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

#### [14-2] Pentabromodiphenyl ethers /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 13/36 (Missing value: 0)
Detection Frequency (sample): 13/36 (Missing value: 0)

Detection limit : 0.05 Quantification limit : 0.12

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.31
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$   \begin{array}{r}     10/3 \sim 10/4 \\     10/4 \sim 10/5 \\     10/5 \sim 10/6   \end{array} $	nd	HV
wate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	0.15	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	nd	MV
baraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	nd	MV
Γokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	tr(0.09)	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$ \begin{array}{c} 11/8 \sim 11/9 \\ 11/9 \sim 11/10 \\ 11/10 \sim 11/11 \end{array} $	0.19	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.12	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	tr(0.05)	HV
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
shikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/12~9/13 9/13~9/14 9/14~9/15	tr(0.07)	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.31	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	nd	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	nd	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.20	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{c}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	nd	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	nd	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	tr(0.05)	HV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	tr(0.05)	HV
		(Kobe City)	10/4~10/5		
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
			10/25~10/26		
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20^{\circ} 10/27}{10/17 \sim 10/18}$	nd	HV
Tinosiiina City	2-7	Timosimia City Rokaanji Jamoi Tiigii School (Tinosimia City)	10/18~10/19	ind ind	11.4
			$10/19 \sim 10/20$		
Vama ayahi Duaf	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
Yamaguchi Pref.	23		9/13/~9/20	na	IVI V
		Environment (Yamaguchi City)			
	2.	W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0/12 0/20	,	
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
			10/21 10/22		
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	nd	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	tr(0.05)	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	$11/7 \sim 11/8$	nd	HV
		(Uwajima City)	$11/8 \sim 11/9$		
			$11/9 \sim 11/10$		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	tr(0.11)	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	nd	MV
C					
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
11011011010111011		Environmental Science (Udo City)	11/8~11/9	1.0	
		( ())	11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	tr(0.05)	MV
ivii yazaki I ICI.	) )	Environment (Miyazaki City)	10/11 - 10/10	u(0.03)	1 <b>v1 V</b>
		Environment (wiryazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
Kagosiiiiia Prei.	34	· ·		na	пν
		and Public Health (Kagoshima City)	9/27~9/28		
01: 5 0	1 2 -	G H 1 W : 'V''I	9/28~9/29		****
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

#### [14-2-1] 2,2',4,4',5-Pentabromodiphenyl ether (#99) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 14/36 (Missing value: 0)
Detection Frequency (sample): 14/36 (Missing value: 0)

Detection limit : 0.04 Quantification limit : 0.09

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.14
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
Local communities	INO.		Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	0.12	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	tr(0.04)	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	tr(0.08)	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	0.14	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.09	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	tr(0.04)	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	tr(0.05)	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.13	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	nd	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	nd	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.14	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	nd	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	nd	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	tr(0.05)	HV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	tr(0.04)	HV
		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
		, , , , , , , , , , , , , , , , , , , ,	10/25~10/26		
			10/26~10/27		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	nd	HV
J			10/18~10/19		
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
r umagacini r ren.	23	Environment (Yamaguchi City)	J/15 J/20	ii d	141 4
		Zivinomion (1 minguom eng)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
	20	Traditional Westure Center (Tradi City)	J/15 J/20	ii d	111 1
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	nd	HV
i okusiiiiia i ici.	21	Environmental Sciences Center (Tokushima City)	10/24 - 10/25 $10/25 \sim 10/26$	na	11 V
		Environmental Sciences Center (Tokushima City)	$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	tr(0.04)	MV
Kagawa Fici.	20	Sciences and Public Health (Takamatsu City)	9/27 10/4	u(0.04)	IVI V
		Sciences and I done Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
Eminic 1 Ici.	2)	(Uwajima City)	11/8~11/9	na	11 *
		(Owajima City)	11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	tr(0.08)	HV
rukuoka 11ci.	30	Official City Government Building (Official City)	10/4 - 10/3 $10/5 \sim 10/6$	11(0.08)	11 V
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$10/6 \sim 10/7$ $9/27 \sim 10/4$	nd	MV
Saga Prei.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27 ~ 10/4	na	IVI V
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
Kumamoto Pici.	32	Environmental Science (Udo City)	$11/7 \sim 11/8$ $11/8 \sim 11/9$	na	11 V
		Environmental Science (Odo City)	11/8~11/9		
Missagalsi Duaf	22	Microgali Duefestanal Institute for Dublic Healths:		t=(0,04)	MV
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	tr(0.04)	IVI V
		Environment (Miyazaki City)			
V 1- : D C	2.4	Variable Definition I I stirt for Engineering 1D	0/26 - 0/27	1	1137
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
		and Public Health (Kagoshima City)	9/27~9/28		
01: 5 2	2.5		9/28~9/29		****
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

## [14-3] Hexabromodiphenyl ethers /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 1/36 (Missing value: 0)
Detection Frequency (sample): 1/36 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.5

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.6
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
			10/4~10/5		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	nd	HV
			9/28~9/29		
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	nd	MV
Tumuguta Tren		City)	3/20 10/3	na -	171 7
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	nd	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	nd	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	nd	HV
Kanagawa Fici.	9	Kanagawa Environmentai Kesearen Center (Tinatsuka City)	11/9~11/10	IIG	11 V
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute	10/11~10/18	nd	MV
Tokonama City	10	(Yokohama City)	10/11 - 10/18	na	IVI V
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	nd	HV
			9/13~9/14		
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	nd	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	0.6	HV
		Environment (Kofu City)	9/27~9/28		
			9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	nd	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26	·	
		, 5	10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	nd	MV
M. D. C	10	MC P C . W III . I P	10/04 10/07		
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	nd	HV
		(Yokkaichi City)	10/25~10/26		
			10/26~10/27		-
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	$10/11 \sim 10/12$	nd	HV
		Annex (Osaka City)	$10/12 \sim 10/13$		
	I		10/13~10/14		

Local communities	No.	Monitored sites	Warm season		Air sampler
			Sampling dates	Measured value	•
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV
		(Kobe City)	$10/4 \sim 10/5$		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	nd	HV
City	۱ - ·	The second of th	10/18~10/19		
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
i amaguem i iei.	23	Environment (Yamaguchi City)	7/13 7/20	na	IVI V
		Environment (1 amaguem enty)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
	20	Tragi Treatur and Werrare Center (Tragi City)	9/13/ 9/20	IIG	IVI V
F.1	27	T-11-i Df41 D1-1 H14 D111 1	10/24 - 10/25	1	HV
Γokushima Pref.	21	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	nd	ΗV
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
r D 0	20	T D O I I D I I I I I I I I I I I I I I I	10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	nd	MV
		Sciences and Public Health (Takamatsu City)			
			11.5		
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	nd	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	nd	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV
•		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
	-	and Public Health (Kagoshima City)	9/27~9/28		-117
		(Language City)	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
Annawa 1 ICI.		Cape Hedo (Ranigaini vinage)	9/27~9/28	IIG	11 4
			9/28~9/29		
			9/20,09/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) nd: Not detected

# $[14\mbox{-}3\mbox{-}1]$ 2,2',4,4',5,5'-Hexabromodiphenyl ether (#153) /air (pg/m $^3$ )

Monitored year: 2022

Detection Frequency (site): 1/36 (Missing value: 0) Detection Frequency (sample): 1/36 (Missing value: 0)

Detection limit : 0.06 Quantification limit : 0.17

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.37
Minimum	nd

Local communities	No.	Monitored sites	Warm season		Air sampler
		W 7 0 101 0 17 (17 27)	Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
			10/4~10/5		
Iwate Pref.	2	Suga Air Quality Manitoning Station (Talvigavya City)	$10/5 \sim 10/6$ $9/27 \sim 9/28$		HV
iwate Prei.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/28~9/29	nd	ΗV
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	nd	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	nd	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	nd	MV
		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	nd	HV
Kanagawa 1 ICi.	,	Kanagawa Environmentai Research Center (Tinatsuka City)	11/9~11/10	IId	11 V
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	nd	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	nd	HV
			9/27~9/28		
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/28~9/29 9/12~9/13	nd	HV
Toyama Tici.	12	Tollatili Ali Quality Monitoring Station (Tollatili City)	9/13~9/14	nu	11 V
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	nd	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	0.37	HV
		Environment (Kofu City)	9/27~9/28		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	9/28~9/29 11/7~11/14	nd	MV
Nagano Fiel.	13	(Nagano City)	11// ~11/14	na	IVI V
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	nd	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	nd	HV
		(Yokkaichi City)	10/25~10/26		
Zvoto Deif	10	Kyoto Prefecture Joyo Senior High School (Joyo City)	$10/26 \sim 10/27$ $9/26 \sim 9/27$	nd nd	HV
Kyoto Prif.	19	Kyoto Fretecture Joyo Semor Fign School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$	nd	п٧
			9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	10/11~10/12	nd	HV
• •••	-	Annex (Osaka City)	10/12~10/13		
	l		10/13~10/14		

Local communities	NT.	Monitored sites	Warm season		A :1
Local communities	No.		Sampling dates	Measured value	Air sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	10/3~10/4	nd	HV
Ž		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
		Tomit in Quanty Homering States (Tomit City)	$10/25 \sim 10/26$	114	
			$10/26 \sim 10/27$		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$10/24 \sim 10/25$	nd	HV
Similatic 1 Ici.	23	Oktivational relations of valory (Oktiosimia Town)	$10/25 \sim 10/26$	na	11 (
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/20 < 10/27$ $10/17 \sim 10/18$	nd	HV
miosiima City	24	Throshina City Kokutaiji Julioi Tiigli School (Tilioshina City)		IIG	11 V
			10/18~10/19		
1: D. C	2.5	Y 1'D C 1 1 C 2 CD 11' 11 14 1	10/19~10/20	1	107
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
		Environment (Yamaguchi City)			
	2.	W :W 11 1W 10 G . W 16')	0/12 0/20		
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$	nd	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	nd	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	$11/7 \sim 11/8$	nd	HV
		(Uwajima City)	$11/8 \sim 11/9$		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	nd	HV
			$10/5 \sim 10/6$		
			10/6~10/7		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	nd	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV
, 1 101.		Environment (Miyazaki City)	15/11 10/10	110	111 1
		(,			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
ragosiiiia i ici.	94	and Public Health (Kagoshima City)	9/27~9/28	IIG	11 V
		and I done Heardi (Magosiiiiia City)	9/28~9/29		
Okinawa Pref.	25	Cono Hada (Vunicami Villaga)		nd	HV
Okiliawa Prei.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	пν
			9/27~9/28		
	<u> </u>		9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

[14-3-2] 2,2',4,4',5,6'-Hexabromodiphenyl ether (#154) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 1/36 (Missing value: 0) Detection Frequency (sample): 1/36 (Missing value: 0)

Detection limit : 0.07 Quantification limit : 0.19

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(0.17)
Minimum	nd

Local communities	No.	Monitored sites	Warm season		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
			10/4~10/5		
	_		10/5~10/6		****
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$	nd	HV
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$10/24 \sim 10/31$	nd	MV
, ,		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	nd	MV
C		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	nd	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	nd	MV
•		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
		emanyana istana (e gasarrata 1 mage)	11/0 11/10		
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	nd	HV
8			11/9~11/10		
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	nd	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	nd	HV
			9/27~9/28		
г рс	10	T : A: O I': M :: C: (T : C:)	9/28~9/29	1	1137
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12\sim 9/13$ $9/13\sim 9/14$	nd	HV
			9/14~9/15		
shikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	nd	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	tr(0.17)	HV
		Environment (Kofu City)	9/27~9/28		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	$9/28 \sim 9/29$ $11/7 \sim 11/14$	nd	MV
vagano i ici.	13	(Nagano City)	11// 11/14	nd	1 <b>V1 V</b>
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	nd	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	nd	HV
	10	(Yokkaichi City)	10/25~10/26	110	11 4
			10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	nd	HV
			9/27~9/28		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	$9/28 \sim 9/29$ $10/11 \sim 10/12$	nd	HV
Jouna 1 101.	19	Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$	IIG	11 V
			$10/12 - 10/13$ $10/13 \sim 10/14$		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV
		(Kobe City)	$10/4 \sim 10/5$		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/17 \sim 10/18$	nd	HV
Tinosinina City		Throsimia city rokaaiji valioi riigii seneer (riirosimia city)	10/18~10/19	ii d	11 ,
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
i amaguem i iei.	23	Environment (Yamaguchi City)	7/13 7/20	na	1V1 V
		Environment (1 amaguem City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
	20	Triagi Treatur and Werlare Center (Tragi City)	9/13/ 9/20	IIG	IVI V
Tokushima Pref.	27	T-11: D	10/24~10/25	1	HV
i okusnima Prei.	21	Tokushima Prefectural Public Health, Pharmaceutical and		nd	нv
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
II D C	20	W. D. C. and D. L. C. and C. D. and C. D. C. and C. D. C. and C. D. C. and C. D. C. and C. D. C. and C. D. C. and C. D. C. and C. D. C. and C. D. C. and C. C. and C. C. and C. C. and C. C. and C. C. and C. C. and C. C. and C. and C. C. and C. C. and C. C. and C. C. and C.	10/26~10/27	1	107
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	nd	MV
		Sciences and Public Health (Takamatsu City)			
T1: D 0	20		11/5 11/0		****
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	nd	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	nd	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	nd	HV
		Environmental Science (Udo City)	$11/8 \sim 11/9$		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
J		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28		-1.1
			9/28~9/29		
	1		1120 - 3129		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

## [14-4] Heptabromodiphenyl ethers /air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 1/36 (Missing value: 0)
Detection Frequency (sample): 1/36 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.4

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	1.0
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	•
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
11			$10/4 \sim 10/5$		
			$10/5 \sim 10/6$		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	nd	HV
			9/28~9/29		
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	nd	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	nd	MV
		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
		emengina isiana (ogasawara + mage)	11/0 11/13	na	111 1
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	nd	HV
			11/9~11/10		
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	nd	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	nd	HV
1 11 garas 1 1 0 11		o yana in Quanty memering station (ringual enty)	9/27~9/28		
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	nd	HV
·			9/13~9/14		
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	nd	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	1.0	HV
		Environment (Kofu City)	9/27~9/28		
Nagano Pref.	1.5	Nagano Environmental Conservation Research Institute	9/28~9/29		MV
Nagano Prei.	15	(Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	nd	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
		Environmental Sciences (Kakamigahara City)	$10/25 \sim 10/26$		
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	nd	MV
	1.0	Mic Bucketon Harld a 17 1 27 17 17	10/24 - 10/25	4	T13.7
Mia Duof	18	Mie Prefecture Health and Environment Research Institute	$\frac{10/24 \sim 10/25}{10/25 \sim 10/26}$	nd	HV
Mie Pref.		(Voltkojski City)	$10/25 \sim 10/26$		
Mie Pref.		(Yokkaichi City)			
	10		10/26~10/27	nd	ш
	19	(Yokkaichi City)  Kyoto Prefecture Joyo Senior High School (Joyo City)	10/26~10/27 9/26~9/27	nd	HV
	19		$10/26 \sim 10/27$ $9/26 \sim 9/27$ $9/27 \sim 9/28$	nd	HV
Mie Pref.  Kyoto Prif.  Osaka Pref		Kyoto Prefecture Joyo Senior High School (Joyo City)	$   \begin{array}{r}     10/26 \sim 10/27 \\     9/26 \sim 9/27 \\     9/27 \sim 9/28 \\     9/28 \sim 9/29   \end{array} $		
	19		$10/26 \sim 10/27$ $9/26 \sim 9/27$ $9/27 \sim 9/28$	nd nd	HV

Local communities	No.	Monitored sites	Warm season		
			Sampling dates	Measured value	Air sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV
		(Kobe City)	$10/4 \sim 10/5$		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/17 \sim 10/18$	nd	HV
Tinosinina City		Throsimia city reacailt value riigh seneer (riirosimia city)	10/18~10/19	ii d	11 ,
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
i amaguciii Fici.	23	Environment (Yamaguchi City)	9/13/ 9/20	IIG	IVI V
		Environment (Tamaguchi City)			
	26	H :H 14 1W16 C + (H :C:()	9/13~9/20	1	107
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
m 1 1: p 2			10/01 10/05	1	****
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	nd	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	nd	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	$11/7 \sim 11/8$	nd	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	nd	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	nd	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
		• • • • • • • • • • • • • • • • • • • •	11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV
,		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
ixagosiiiiia i ici.	J- <b>T</b>	and Public Health (Kagoshima City)	9/27~9/28	IIU	11 V
		and I done Heartii (Magosiiiiia City)	9/28~9/29		
Okinawa Pref.	25	Cono Hada (Vunicami Villaga)	$9/28 \sim 9/29$ $9/26 \sim 9/27$	nd	HV
Okiliawa Prei.	35	Cape Hedo (Kunigami Village)		na	пν
			9/27~9/28		
	<u> </u>		9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

## [14-4-1] 2,2',3,3',4,5',6-Heptabromodiphenyl ether (#175) /air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 0/36 (Missing value: 0)
Detection Frequency (sample): 0/36 (Missing value: 0)

Detection limit : 0.06 Quantification limit : 0.15

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
			10/4~10/5		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	nd	HV
			9/28~9/29		
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	nd	MV
		City)	,,_,		
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	nd	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	nd	MV
		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	nd	HV
			11/9~11/10		
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	nd	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	nd	HV
			9/13~9/14		
1.1. D. C	1.2	71.7 D.C. 17 C. CD.11 17 14 1	9/14~9/15		****
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	nd	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/14~9/15 9/26~9/27	nd	HV
i amanasm Prei.	14	Environment (Kofu City)	9/27~9/28	na	п٧
		Environment (Kolu City)	9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	11/7~11/14	nd	MV
Nagano I ICI.	13	(Nagano City)	11// - 11/14	IId	1 <b>V1 V</b>
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	nd	MV
Mie Pref.	10	Mie Prefecture Health and Environment Research Institute	10/24~10/25	n.d	1117
IVIIC FICI.	18	(Yokkaichi City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$	nd	HV
		(TOKKUIVIII CITY)	$10/26 \sim 10/20$ $10/26 \sim 10/27$		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	nd	HV
xy010 1 111.	17	reyolo Frenceitie Joyo Schiol Frigh School (Joyo City)	9/27~9/28	IIU	11 V
			9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	$\frac{9/28}{59/29}$	nd	HV
Osaka 1 ICI.	17	Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$	IIU	11 V
		Zillica (Osaka City)			
	<u> </u>		10/13~10/14		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	•
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV
		(Kobe City)	$10/4 \sim 10/5$		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
		, , , , , , , , , , , , , , , , , , , ,	10/25~10/26		
			10/26~10/27		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	nd	HV
		, , , <u>g</u> .: ( ( (	10/18~10/19		
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
r amagaem r rei.	23	Environment (Yamaguchi City)	7/13 7/20	na	141 4
		Environment (Tuningueni City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
	20	Tragi Treath and Wenare Center (Tragi City)	7/13 7/20	na	1V1 V
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	nd	HV
i Okusiiiiia 1 ici.	21	Environmental Sciences Center (Tokushima City)	10/24 - 10/25 $10/25 \sim 10/26$	na	11 V
		Environmental Sciences Center (Tokusinina City)			
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$10/26 \sim 10/27$ $9/27 \sim 10/4$	nd	MV
Kagawa Prei.	28	Sciences and Public Health (Takamatsu City)	9/2/~10/4	na	IVI V
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
Simile 1 Ici.	23	(Uwajima City)	11/8~11/9	na	11 V
		(Cwajima City)	11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	nd	HV
rukuoka Prei.	30	Omuta City Government Building (Omuta City)		na	пν
			10/5~10/6		
7 D C	2.1		10/6~10/7	1	107
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	nd	MV
7 , D C	22	V . D C . 11 C . CD 11 II 14 1	11/7 11/0	1	1137
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	nd	MV
		Environment (Miyazaki City)			
			0.12 0.12 =		
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) nd: Not detected

[14-4-2] 2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183) /air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 4/36 (Missing value: 0)
Detection Frequency (sample): 4/36 (Missing value: 0)

Detection limit : 0.06 Quantification limit : 0.15

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.96
Minimum	nd

Local communities	No.	Monitored sites	Warm	Air sampler	
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
			10/4~10/5		
D. C	2	G A O I' M ' C C C C	10/5~10/6	1	1137
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$	nd	HV
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	tr(0.06)	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	tr(0.06)	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	tr(0.06)	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	nd	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	nd	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.96	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	nd	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	nd	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	nd	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	nd	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	nd	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	nd	HV

Local communities	No.	Monitored sites	Warm	Air sampler	
			Sampling dates	Measured value	All sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV
•		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
		Tomit in Quality Memoring States (1 time eng)	$10/25 \sim 10/26$	110	
			$10/26 \sim 10/27$		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$10/24 \sim 10/27$	nd	HV
Sillilane Fiel.	23	Oki National Acid Kani Observatory (Okinosinina Town)		IIG	11 V
			$10/25 \sim 10/26$		
** 1: 0:	2.4	VI 1: 0: VI 1 : VI 1 0 1 1 (VI 1 1 0 1 )	10/26~10/27		****
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	nd	HV
			10/18~10/19		
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	9/13~9/20	nd	MV
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	nd	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental Sciences and Public Health (Takamatsu City)	9/27~10/4	nd	MV
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$\frac{10/4 \sim 10/5}{10/4 \sim 10/5}$	nd	HV
ukuoka 11ci.	30	Omata City Government Bunding (Omata City)	$10/5 \sim 10/6$	na	11 v
7 Df	2.1	S P	$10/6 \sim 10/7$ $9/27 \sim 10/4$	1	MA
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/2/~10/4	nd	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
		Zirindinini beleliee (Gue Girj)	11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	nd	MV
viiyazaki Frei.	33	Environment (Miyazaki City)	10/11/~10/18	nd	IVI V
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
		(	9/27~9/28		
			9/28~9/29		
	l		2120 - 2129	l l	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

### [14-5] Octabromodiphenyl ethers /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 12/36 (Missing value: 0)
Detection Frequency (sample): 12/36 (Missing value: 0)

Detection limit: 0.1 Quantification limit: 0.3

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.4
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
Local collinations	INO.		Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	tr(0.1)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$   \begin{array}{c}     10/3 \sim 10/4 \\     10/4 \sim 10/5 \\     10/5 \sim 10/6   \end{array} $	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	tr(0.1)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	tr(0.1)	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	tr(0.1)	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	tr(0.1)	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	tr(0.1)	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	nd	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.4	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	nd	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	nd	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	nd	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	nd	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	tr(0.1)	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	nd	HV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV
		(Kobe City)	$10/4 \sim 10/5$		
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
Similane 1 Ten.	23	OKI I validna I rola Ram Observatory (Okinosimia Town)	$10/25 \sim 10/26$	in G	11 ,
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/20 < 10/27$ $10/17 \sim 10/18$	tr(0.1)	HV
miosiima City	24	Throshinia City Kokutaiji Julioi Tiigli School (Tilroshinia City)		u(0.1)	11 V
			10/18~10/19		
			10/19~10/20	_	
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
		Environment (Yamaguchi City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$	nd	HV
		Environmental Sciences Center (Tokushima City)	$10/25\sim 10/26$		
			$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	tr(0.1)	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	tr(0.1)	HV
		g (	10/5~10/6	-(0.2)	
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	nd	MV
Saga I ICI.	31	Saga Trefectural Environmental Research Center (Saga City)	)/2/ 10/ <del>4</del>	na	IVI V
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
Kumamoto i ici.	32	Environmental Science (Udo City)	11/8~11/8	na	11 V
		Environmental science (Odo City)			
3.6. 1:D.6	22	M. I.D.C. II. C. C. D.H. II. II. I	11/9~11/10	. (0.1)	107
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	tr(0.1)	MV
		Environment (Miyazaki City)			
Vdim P C	2.4	Was aline Desfect and Institute C. D. 1	0/26 - 0/27	1	1137
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
		and Public Health (Kagoshima City)	9/27~9/28		
	<u> </u>		9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

## [14-6] Nonabromodiphenyl ethers /air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 15/36 (Missing value: 0)
Detection Frequency (sample): 15/36 (Missing value: 0)

Detection limit: 0.3 Quantification limit: 0.7

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	1.0
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
Local communities	INO.		Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$	tr(0.3)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	tr(0.4)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	tr(0.4)	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	tr(0.6)	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	1.0	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	tr(0.5)	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	nd	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	tr(0.6)	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	tr(0.3)	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	0.8	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	nd	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	nd	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	tr(0.6)	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	tr(0.4)	HV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV
		(Kobe City)	10/4~10/5		
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
			10/25~10/26		
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20^{\circ} 10/27}{10/17 \sim 10/18}$	tr(0.4)	HV
Tinosinina City	2-7	Throsinna City Rokaanji Jamoi Tiigii School (Tiirosinna City)	10/18~10/19	4(0.4)	11.4
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
i amaguciii Fici.	23	Environment (Yamaguchi City)	9/13/ 9/20	IIG	IVI V
		Environment (Tamaguchi City)			
	26	H :H 14 1W10 C + (H :C:()	9/13~9/20	1	107
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
m 1 1: p 2			10/01 10/05	,	****
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	nd	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	tr(0.5)	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	$11/7 \sim 11/8$	tr(0.6)	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	0.7	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	nd	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV
•		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
		and Public Health (Kagoshima City)	9/27~9/28		
		The I would remain (Imgosinim City)	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
Okinawa i ici.	33	Cape Hedo (Ranigaini vinage)	9/27~9/28	IIG	11 4
			9/28~9/29		
			9120, 59129		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

## [14-7] Decabromodiphenyl ether /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 33/36 (Missing value: 0)
Detection Frequency (sample): 33/36 (Missing value: 0)

Detection limit: 0.3 Quantification limit: 0.9

	Aggregated value
Geometric mean	2.0
Median	1.8
Maximum	16
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
Local communities	INO.	Monitored sites	Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	1.0	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$	1.7	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	tr(0.6)	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	2.3	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	1.8	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	2.7	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	5.4	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	12	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	3.8	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	1.1	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	tr(0.8)	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	1.3	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	4.6	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	4.2	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	16	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	1.7	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	1.9	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	5.5	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	5.6	HV

Local communities	No.	Monitored sites		season	Air sampler
	TVO.		Sampling dates	Measured value	All sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	1.1	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	2.7	HV
·		(Kobe City)	10/4~10/5		
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	1.6	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$10/24 \sim 10/25$	nd	HV
Similane 1 Ten.	23	OKI I Vational Field Fain Observatory (Okinosimia Town)	$10/25 \sim 10/26$	in G	11 (
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	3.9	HV
miosiima City	24	Timoshinia City Kokutaiji Julioi Tiigii School (Tinoshinia City)		3.9	11 V
			10/18~10/19		
1: D. C	2.5	Y 1'D 0 1 1 1 1 1 1 1 1 1 1	10/19~10/20	1.4	107
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	1.4	MV
		Environment (Yamaguchi City)			
	L		0.11.0		
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	1.7	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	1.7	HV
		Environmental Sciences Center (Tokushima City)	$10/25\sim 10/26$		
			$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	5.8	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	$11/7 \sim 11/8$	10	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	14	HV
			$10/5 \sim 10/6$		
			10/6~10/7		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	0.9	MV
54ga 1141		Sugur 1 Toto Couran Est. Holamonian 1 Costation Couran (Sugur City)	<i>3121</i> 101.	0.5	111 7
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	2.0	HV
Kumamoto i ici.	32	Environmental Science (Udo City)	11/8~11/9	2.0	11 V
		Environmental Science (Odo City)	11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	tr(0.8)	MV
wiiyazaki Fici.	33	1 7	10/11/~10/18	u(0.8)	IVI V
		Environment (Miyazaki City)			
TZ 1: D 0	2.4	TV 1' D C 4 1T C 4 C D ' 4 C D '	0/06 0/07	1.6	1777
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	1.6	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28		
			$9/28 \sim 9/29$		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

## [15] Perfluorooctane sulfonic acid (PFOS) /air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit : 0.07 Quantification limit : 0.19

	Aggregated value
Geometric mean	4.6
Median	5.3
Maximum	8.6
Minimum	1.2

Local communities	No.	Monitored sites	Warm	Air sampler	
Local communities	INO.	Monitored sites	Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	7.9	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$   \begin{array}{r}     10/3 \sim 10/4 \\     10/4 \sim 10/5 \\     10/5 \sim 10/6   \end{array} $	5.4	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	2.0	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	8.2	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	8.1	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	8.6	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	7.2	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	8.5	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	2.1	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	7.6	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	6.2	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	4.5	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	5.2	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	2.6	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	6.3	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	2.3	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	5.6	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	2.9	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	3.3	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	3.4	HV

Local communities	No. Monitored sites		Warm	Air sampler	
	110.		Sampling dates	Measured value	•
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	4.8	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	4.5	HV
		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	2.5	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	3.0	HV
		, , , , , , , , , , , , , , , , , , , ,	10/25~10/26		
			10/26~10/27		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	2.3	HV
,		, , , , , , , , , , , , , , , , , , , ,	10/18~10/19		
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	7.2	MV
1 unuguen 1 1 un		Environment (Yamaguchi City)	y/15 y/20	,	
		Zivinomion (1 minguom eng)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	7.0	MV
	20	Traditional Westure Center (Tradi City)	J/15 J/20	7.0	111 1
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	2.9	HV
i okusiiiiia i ici.	21	Environmental Sciences Center (Tokushima City)	10/24 - 10/25 $10/25 \sim 10/26$	2.7	11 V
		Environmental Sciences Center (Tokushima City)	$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	7.8	MV
Kagawa Fici.	20	Sciences and Public Health (Takamatsu City)	9/27 10/4	7.0	IVI V
		Sciences and I done Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	3.2	HV
Jillic I Ici.	2)	(Uwajima City)	11/8~11/9	3.2	11 V
		(Owajima City)	11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	5.2	HV
rukuoka 11ci.	30	Official City Government Building (Official City)	10/4 - 10/3 $10/5 \sim 10/6$	3.2	11 V
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$10/6 \sim 10/7$ $9/27 \sim 10/4$	7.3	MV
Saga Prei.	31	Saga Prefectural Environmental Research Center (Saga City)	9/2/~10/4	7.3	IVI V
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	1.2	HV
Kumamoto Prei.	32		11/8~11/9	1.2	п۷
		Environmental Science (Udo City)			
1:D C	22	M: 1:D C + 11 4:4 C D 11: 11 14 1	11/9~11/10		107
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	6.6	MV
		Environment (Miyazaki City)			
	2.	W. II. D.C. IV. de C. D. de C.	0/26 0/27	5.0	****
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	5.9	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	6.7	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

### [16] Perfluorooctanoic acid (PFOA) /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.5

	Aggregated value
Geometric mean	11
Median	10
Maximum	26
Minimum	4.1

Local communities	No.	Monitored sites	Warm		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	6.4	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	4.3	HV
		(	$10/4 \sim 10/5$		
			$10/5 \sim 10/6$		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	4.1	HV
iwate i ici.	3	Sugo Ali Quanty Monitoring Station (Takizawa City)	9/28~9/29	4.1	11 V
			***************************************		
		ACTION OF THE STATE OF THE STAT	9/29~9/30	10	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	12	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	7.0	MV
C		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	24	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	21	MV
•		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	9.6	MV
		Character ( Gasarrata / Hage)	11.0 11/13	7.0	141 4
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	8.3	HV
ranagawa 1 ren		Training we Environmental Research Conter (Thraisana City)	11/9~11/10	0.5	11 '
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute	$10/11 \sim 10/18$	19	MV
i okonama City	10	(Yokohama City)	10/11/ - 10/18	19	IVI V
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	16	HV
8			9/27~9/28	-	
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	9.6	HV
rojuna rren	1	Tonam 7 in Quarty Monitoring Station (Tonam City)	9/13~9/14	7.0	11 '
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	8.7	HV
ISIIIKawa FICI.	13	Environmental Science (Kanazawa City)	9/12~9/13	0.7	11 V
		Environmental Science (Kanazawa City)			
Vamous -1.: D. C	1.4	Vomennachi Duofactural Institute of Dudai: III 141 1	9/14~9/15	1.4	1117
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	14	HV
		Environment (Kofu City)	9/27~9/28		
	<u> </u>		9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	$11/7 \sim 11/14$	10	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	$10/24 \sim 10/25$	9.3	HV
		Environmental Sciences (Kakamigahara City)	$10/25 \sim 10/26$		
	<u> </u>		$10/26 \sim 10/27$		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	11	MV
N.C. D. O.			10/04 10/05		
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	11	HV
		(Yokkaichi City)	10/25~10/26		
			$10/26 \sim 10/27$		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	10	HV
			9/27~9/28		
	L	<u> </u>	9/28~9/29		
	19	Osaka Joint Prefectural Government Building, Building 2	10/11~10/12	26	HV
Osaka Pref.	1)				
Osaka Pref.	17	Annex (Osaka City)	10/12~10/13	20	

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	21	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	16	HV
		(Kobe City)	10/4~10/5		
			10/5~10/6	1	
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	8.1	HV
			10/25~10/26	1	
			10/26~10/27	1	
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	4.9	HV
		, , , , , , , , , , , , , , , , , , , ,	10/25~10/26	1	
			10/26~10/27	1	
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	12	HV
J		, , , , , , , , , , , , , , , , , , , ,	10/18~10/19	1	
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	12	MV
1 umagarem 1 1en		Environment (Yamaguchi City)	y/15 y/20	12	111
		Zivinomion (1 minguom eng)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	12	MV
		(ringi croy)	y, 15 y, 20	12	111
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	11	HV
r okusiiiiiu r roi.	- /	Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$	11	11 7
		Environmental Sciences Center (Tokasımıla City)	$10/26 \sim 10/27$	1	
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	23	MV
Ragawa 1 ICI.	20	Sciences and Public Health (Takamatsu City)	7/2/ 10/4	23	1V1 V
		Sciences and I done I reach (Takamatsa City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	23	HV
Eminic 1 Ici.	2)	(Uwajima City)	11/8~11/9	25	11 4
		(Owajina Orty)	11/9~11/10	1	
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	8.9	HV
ukuoku 11ci.	50	Omata City Government Bullaning (Omata City)	$10/5 \sim 10/6$	0.5	11 4
			$10/6 \sim 10/7$	1	
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	9.3	MV
Saga 1 ICI.	31	Saga i relecturar Environmentar research center (Saga City)	7/2/ 10/4	7.3	1V1 V
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	5.8	HV
ixamumow i ici.	32	Environmental Science (Udo City)	11/8~11/9	3.0	11 4
		Environmental belefice (odo city)	11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	8.2	MV
IVII YAZAKI FICI.	د د	Environment (Miyazaki City)	10/11 - 10/18	0.2	1V1 V
		Livitoinicii (iviiyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	17	HV
Kagosiiiiia Piei.	34		$9/26 \sim 9/27$ $9/27 \sim 9/28$	1 /	п۷
		and Public Health (Kagoshima City)	***************************************		
Ol-i P. C	25	Computed (Vernisonsi Village)	9/28~9/29	4.1	HV
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	4.1	нv
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

## [17] Pentachlorobenzene/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit : 0.03 Quantification limit : 0.08

	Aggregated value
Geometric mean	60
Median	60
Maximum	130
Minimum	30

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	41	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	41	HV
11 7			$10/4 \sim 10/5$		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	54	HV
		Sugerin Quanty Memoring Sunten (Tunizawa eny)	9/28~9/29	٠.	
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$10/24 \sim 10/31$	36	MV
, wg. 1 141		(Sendai City)	10/21 10/01		1,1
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	67	MV
Tumuguta Troi.	,	City)	<i>3</i> /20 10/3		1,1 ,
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	75	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	110	MV
- <i>y</i> <del></del>	ĺ	Protection (Koto Ward)	10.21		
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	120	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	64	HV
ranagawa 1101.		Tamagawa Environmentar resourch conter (Tinassaka city)	11/9~11/10	01	11 '
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute	10/11~10/18	74	MV
Tononum eng	10	(Yokohama City)	10/11 10/10	, .	1,1
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	65	HV
8			9/27~9/28		
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	130	HV
,		(	9/13~9/14		
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	58	HV
isinkawa 1 ici.	13	Environmental Science (Kanazawa City)	9/13~9/14	30	11 1
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	70	HV
- aliminolii i ici.		Environment (Kofu City)	9/27~9/28	, ,	11 1
		(10.00 0.00)	9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	11/7~11/14	59	MV
	13	(Nagano City)	11// 11/17		1AT A
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	47	HV
O114 1 101.	10	Environmental Sciences (Kakamigahara City)	$\frac{10/24 - 10/23}{10/25 \sim 10/26}$	77	11 4
		Zin i Simonari Seronoes (Tantanniganara City)	$10/26 \sim 10/26$		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	54	MV
rugoya City	1/	Chinasa maid Holma Laik (Nagoya City)	10/-f 10/11	J4	1 <b>V1 V</b>
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	47	HV
		(Yokkaichi City)	10/25~10/26		
			10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	65	HV
			9/27~9/28		
•		1			
•			$9/28 \sim 9/29$	l l	
	19	Osaka Joint Prefectural Government Building Building?	9/28~9/29 10/11~10/12	61	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$9/28 \sim 9/29$ $10/11 \sim 10/12$ $10/12 \sim 10/13$	61	HV

Local communities	No.	Monitored sites		season	Air sampler
Local communities	110.	WOIITOICU SICS	Sampling dates	Measured value	•
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	72	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	10/3~10/4	56	HV
		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	37	HV
			10/25~10/26	Ì	
			10/26~10/27	1	
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	30	HV
			10/25~10/26		
			10/26~10/27	1	
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	53	HV
		in any animal and a second (and animal any)	10/18~10/19		-* *
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	71	MV
i amagaem i iei.	23	Environment (Yamaguchi City)	7/13 7/20	/ 1	141 4
		Environment (Tuningueni City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	65	MV
	20	Tragi Treath and Wenare Center (Tragi City)	7/13 7/20	03	1V1 V
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	42	HV
i okusiiiiia i ici.	21	Environmental Sciences Center (Tokushima City)	10/24 - 10/25 $10/25 \sim 10/26$	72	11 V
		Environmental Sciences Center (Tokusinina City)			
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$10/26 \sim 10/27$ $9/27 \sim 10/4$	84	MV
Kagawa Prei.	28	Sciences and Public Health (Takamatsu City)	9/2/~10/4	84	IVI V
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	52	HV
Simile 1 Ici.	23	(Uwajima City)	11/8~11/9	32	11 V
		(Cwajinia City)	11/9~11/10	1	
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	79	HV
rukuoka Prei.	30	Omuta City Government Building (Omuta City)		/9	п٧
			10/5~10/6		
7 D C	2.1		10/6~10/7	72	107
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	72	MV
Kumamoto Pref.	22	V . D C . 11 C . CD 11 II 14 1	11/7 11/0	57	HV
Sumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	3/	HV
		Environmental Science (Udo City)	11/8~11/9		
<i>c</i> 1:D 0	22		11/9~11/10	10	
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	48	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	84	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	42	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

## [19] 1,2,5,6,9,10-Hexabromocyclododecanes /air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 31/36 (Missing value: 0)
Detection Frequency (sample): 31/36 (Missing value: 0)

Detection limit: \*0.18 Quantification limit: \*0.48

	Aggregated value
Geometric mean	0.51
Median	0.52
Maximum	26
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
			Sampling dates	Measured value	-
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	tr(0.31)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	tr(0.29)	HV
			$10/4 \sim 10/5$ $10/5 \sim 10/6$		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	tr(0.22)	HV
		Suger in Quanty memoring sumen (runnum eng)	9/28~9/29	u(0.22)	
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	tr(0.38)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	tr(0.21)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	tr(0.46)	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	2.2	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	1.1	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$ \begin{array}{r} 11/8 \sim 11/9 \\ 11/9 \sim 11/10 \\ 11/10 \sim 11/11 \end{array} $	26	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.64	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28	1.0	HV
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13 9/13~9/14	tr(0.29)	HV
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	tr(0.23)	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
V	1.4	Venezueli Desfertant Institute CD 11' II 14' 1	9/14~9/15	0.00	7117
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	0.90	HV
		Environment (Kofu City)	9/27~9/28 9/28~9/29		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	9/28~9/29 11/7~11/14	0.98	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	tr(0.33)	HV
Onu i ici.	10	Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$	u(0.55)	11 V
			$10/25 \sim 10/26$ $10/26 \sim 10/27$		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.57	MV
			10/04 10/05		
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	0.60	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	1.4	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$   \begin{array}{r}     9/28 & 9/29 \\     \hline     10/11 \sim 10/12 \\     10/12 \sim 10/13 \\     10/13 \sim 10/14   \end{array} $	1.1	HV

Local communities	No.	Monitored sites	Warm	season	Air sampler
	INO.	Wolltored Sites	Sampling dates	Measured value	All sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	0.59	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	0.75	HV
,		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	1.5	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$10/24 \sim 10/25$	nd	HV
		(enmessing revis)	$10/25 \sim 10/26$	11.0	
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20^{\circ} 10/27}{10/17 \sim 10/18}$	1.3	HV
Thoshina City	24	Throshina City Rokutaiji Julioi Tiigii School (Tiiroshina City)	10/18~10/19	1.5	11 V
			$\frac{10/18 - 10/19}{10/19 \sim 10/20}$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	$9/13 \sim 9/20$	nd	MV
i amaguem Fiel.	23	Environment (Yamaguchi City)	3/13 - 3/20	IIG	1V1 V
		Environment (Tamaguchi City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
	20	hagi health and wellare center (hagi city)	9/13/~9/20	na	IVI V
T 1 1: D C	27	T 1 1' D C ( 1D 11' II 14 D) (' 1 1	10/24 10/25	1.4	11117
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	1.4	HV
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	0.67	MV
		Sciences and Public Health (Takamatsu City)			
			11.5	(0.14)	
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	tr(0.44)	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	tr(0.42)	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	tr(0.25)	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	tr(0.43)	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV
-		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	1.4	HV
3		and Public Health (Kagoshima City)	9/27~9/28		
		( <b>g</b>	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
Okinawa 1101.		cupe frede (framgain + mage)	9/27~9/28	IIG	11 4
			9/28~9/29		
			ファムロ マファムフ		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

<sup>(</sup>Note 6) \*: Indicates the sum value of the Quantification [Detection] limits of each target chemicals.

### [19-1] $\alpha$ -1,2,5,6,9,10-Hexabromocyclododecane /air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 35/36 (Missing value: 0)
Detection Frequency (sample): 35/36 (Missing value: 0)

Detection limit : 0.06 Quantification limit : 0.16

	Aggregated value
Geometric mean	0.29
Median	0.28
Maximum	19
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
Local collinations	110.		Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	0.24	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$ $10/5 \sim 10/6$	0.23	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	0.17	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	0.19	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	tr(0.13)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	0.27	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	1.4	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	0.97	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$ $11/9 \sim 11/10$ $11/10 \sim 11/11$	19	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.38	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	0.67	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	tr(0.13)	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	tr(0.11)	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.47	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	0.42	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	0.21	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.34	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	0.28	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	0.50	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	0.32	HV

Local communities	No.	Monitored sites		season	Air sampler
	140.	Wolltored Sites	Sampling dates	Measured value	An sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	0.29	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	0.35	HV
·		(Kobe City)	10/4~10/5		
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	0.58	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
31111111111		om randam rand rand coor, and y (commentation)	$10/25 \sim 10/26$		
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$10/17 \sim 10/18$	0.65	HV
inosimia City	_ <del>-</del>	Timesimia City Kokutanji Junioi Tiigii School (Tiilosiililia City)	10/18~10/18	0.03	11 V
			$10/18 \sim 10/19$ $10/19 \sim 10/20$		
Vomoguel: Deef	25	Yamaguchi Prefectural Institute of Public Health and	$9/13 \sim 9/20$	tr(0.10)	MV
Yamaguchi Pref.	23	Environment (Yamaguchi City)	9/13/~9/20	tr(0.10)	IVI V
		Environment (Tamaguem City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	tr(0.06)	MV
	20	magi mealth and wellare center (magi city)	9/13/~9/20	u(0.06)	IVI V
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	0.57	HV
i okusiiiiia rici.	21	Environmental Sciences Center (Tokushima City)	$10/24 \sim 10/23$ $10/25 \sim 10/26$	0.57	11 V
		Environmental Sciences Center (Tokushima City)			
Kagawa Pref.	20	V	$10/26 \sim 10/27$ $9/27 \sim 10/4$	0.40	MX
Kagawa Prei.	28	Kagawa Prefectural Research Institute for Environmental	$9/2/\sim 10/4$	0.40	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	0.27	HV
Emme Prei.	29	, ,	11/8~11/9	0.27	п٧
		(Uwajima City)			
T. 1 T. 0	20	D 11 (0 1 G)	11/9~11/10	0.22	****
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	0.22	HV
			10/5~10/6		
	L		10/6~10/7		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	tr(0.12)	MV
TZ	22	The second secon	11/7 11/0	0.20	****
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	0.28	HV
		Environmental Science (Udo City)	11/8~11/9		
			$11/9 \sim 11/10$		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	tr(0.11)	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	0.47	HV
		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	tr(0.06)	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

# [19-2] $\beta$ -1,2,5,6,9,10-Hexabromocyclododecane /air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 19/36 (Missing value: 0) Detection Frequency (sample): 19/36 (Missing value: 0)

Detection limit : 0.07 Quantification limit : 0.18

	Aggregated value
Geometric mean	tr(0.07)
Median	tr(0.07)
Maximum	4.1
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	season  Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	Sampling dates $10/4 \sim 10/11$	nd	MV
ноккатао	1	Ramikawa Generai Suopretecturai Bureau (Asanikawa City)	10/4~10/11	na	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
11 7			10/4~10/5		
			10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	nd	HV
			9/28~9/29	1	
			9/29~9/30	1	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	nd	MV
5		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	tr(0.08)	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	0.27	MV
	′	Protection (Koto Ward)	10.1, 10.21	""	111 1
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	4.1	HV
			11/9~11/10		
			11/10~11/11	<u>                                       </u>	
Yokohama City	10	Yokohama Environmental Science Research Institute	10/11~10/18	tr(0.08)	MV
		(Yokohama City)			
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	tr(0.09)	HV
			9/27~9/28	ì	
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	nd	HV
			9/13~9/14		
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	nd	HV
		Environmental Science (Kanazawa City)	9/13~9/14	1	
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	tr(0.08)	HV
		Environment (Kofu City)	9/27~9/28		
	L		9/28~9/29	<u>                                       </u>	
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	11/7~11/14	tr(0.13)	MV
		(Nagano City)			
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
	_	Environmental Sciences (Kakamigahara City)	$10/25 \sim 10/26$	j l	-
		<i>g</i> · <i>y</i> /	$10/26 \sim 10/27$	j l	
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	tr(0.07)	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	tr(0.08)	HV
		(Yokkaichi City)	10/25~10/26		
			10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	tr(0.17)	HV
			9/27~9/28	]	
			9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	10/11~10/12	nd	HV
		Annex (Osaka City)	10/12~10/13		
	l		10/13~10/14	ı	

Local communities	No.	Monitored sites	Warm	season	Air sampler
	Wiolitored sites		Sampling dates	Measured value	All sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	tr(0.09)	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	tr(0.07)	HV
·		(Kobe City)	10/4~10/5	, ,	
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	tr(0.15)	HV
			10/25~10/26	( )	
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
		(enmessing revis)	$10/25 \sim 10/26$	11.0	
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20^{\circ} 10/27}{10/17 \sim 10/18}$	0.22	HV
Tinosinina City	2-7	Throsinna City Rokaanji Jamoi Tiigii School (Tiirosinna City)	10/18~10/19	0.22	11.4
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
i amaguciii Fici.	23	Environment (Yamaguchi City)	9/13/ 9/20	IIG	IVI V
		Environment (1 amagueni City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
	20	hagi health and wellare center (hagi city)	9/13/~9/20	na	IVI V
T 1 1: D C	27	T 1 1' D C ( 1D 11' II 14 D) (' 1 1	10/24 10/25	0.22	TTY
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	0.22	HV
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
			10/26~10/27	(0.40)	
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	tr(0.10)	MV
		Sciences and Public Health (Takamatsu City)			
			11.5	(0.00)	
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	tr(0.08)	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	tr(0.07)	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	nd	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	0.23	HV
-		and Public Health (Kagoshima City)	9/27~9/28		
			9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
	L	1	2.20 2.22	I	

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

# [19-3] $\gamma$ -1,2,5,6,9,10-Hexabromocyclododecane /air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 32/36 (Missing value: 0)
Detection Frequency (sample): 32/36 (Missing value: 0)

Detection limit : 0.05 Quantification limit : 0.14

	Aggregated value
Geometric mean	0.17
Median	0.16
Maximum	3.1
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
			Sampling dates	Measured value	•
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	tr(0.07)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	tr(0.06)	HV
			$10/4 \sim 10/5$ $10/5 \sim 10/6$		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	tr(0.05)	HV
			9/28~9/29		
			9/29~9/30	0.10	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	0.19	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	tr(0.08)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	tr(0.11)	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	0.57	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	tr(0.11)	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9 11/9~11/10	3.1	HV
V 1 1 C'	10	V.1.1 F. (10.1 P. 11.4)	11/10~11/11	0.10	1437
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	0.18	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	0.29	HV
			9/27~9/28		
			9/28~9/29	2.1.5	
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13 9/13~9/14	0.16	HV
			9/13~9/14		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	tr(0.12)	HV
		Environmental Science (Kanazawa City)	9/13~9/14	, ,	
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	0.35	HV
		Environment (Kofu City)	9/27~9/28		
Nagano Pref.	1.5	N. F. AlG. & P. LL &	9/28~9/29	0.42	<b>N</b> 677
Nagano Prei.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	0.43	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	tr(0.12)	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26	, ,	
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	0.16	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	0.24	HV
		(Yokkaichi City)	10/25~10/26		
Kyoto Prif.	10	Kyoto Prefecture Joyo Senior High School (Joyo City)	$10/26 \sim 10/27$ $9/26 \sim 9/27$	0.73	HV
KYOIO PTII.	19	Kyoto Fretecture Joyo Senior High School (Joyo City)	9/26~9/27 9/27~9/28	0./3	пV
			9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	$\frac{10/11 \sim 10/12}{10/11 \sim 10/12}$	0.76	HV
				0	
		Annex (Osaka City)	$10/12 \sim 10/13$		

Local communities	No.	Monitored sites	Warm	Air sampler	
	140.	Wolntored Sites	Sampling dates	Measured value	An sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	0.21	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	0.33	HV
·		(Kobe City)	10/4~10/5		
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	0.79	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
Similarie I Ter.	23	OKI I validital Flora Flam Good valory (Okinosimia Town)	$10/25 \sim 10/26$	in G	111
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	0.39	HV
mirosiiina City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)		0.39	п۷
			10/18~10/19		
1'D C	25	Y 1'D C 4 11 C 4 CD 11' II 14 1	10/19~10/20	. (0.07)	1477
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	tr(0.07)	MV
		Environment (Yamaguchi City)			
	26	H : H 14 1W 16 G + (H : G')	0/12 0/20	1	107
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
T 1 1' D C	27	T 1 1' D C ( 1D 11' II 14 D) ( 1 1	10/24 10/25	0.60	1137
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	0.60	HV
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	0.17	MV
		Sciences and Public Health (Takamatsu City)			
			11.5	(0.00)	
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	tr(0.09)	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	tr(0.13)	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	tr(0.13)	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	0.15	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV
•		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	0.70	HV
		and Public Health (Kagoshima City)	9/27~9/28	0.,0	
		(Lagorina City)	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
OKIIIAWA I ICI.	) )	Cape 11000 (Kumgami v mage)	9/27~9/28	nu	11 V
			9/28~9/29		
			3120 9129		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd : Not detected

#### [21] Hexachlorobuta-1,3-diene/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 108/108 (Missing value: 0)

Detection limit : 20 Quantification limit : 50

	Aggregated value
Geometric mean	2,400
Median	2,300
Maximum	5,000
Minimum	1.700

Local communities	No.	Monitored sites	Warm season		Air sampler
Local communities	INO.	Monitored sites	Sampling dates	Measured value	Air sampier
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/5	2,100	LV
			10/5~10/6	1,700	
			10/6~10/7	2,100	
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$	3,500	LV
11 ,			$10/4 \sim 10/5$	2,100	
			10/5~10/6	1,800	
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	3,000	LV
		Suge III Quality Memoring Sunten (Tunizawa eny)	9/28~9/29	2,600	2.
			9/29~9/30	3,100	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$10/24 \sim 10/25$	2,000	LV
winyagi i ici.		(Sendai City)	$10/25 \sim 10/26$	1,800	E,
		(Serious eng)	$10/26 \sim 10/27$	1,900	
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/27~9/28	2,600	LV
i ailiagata i ici.	)	City)	9/28~9/29	2,500	LV
		City)	9/28 - 9/29 $9/29 \sim 9/30$	2,800	
Ibaraki Pref.	-	The solid Manager County (Total Science County (Total Science		· ·	LV
Ibaraki Prei.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~9/28	3,000	LV
		City)	9/28~9/29	3,200	
T.1. M:	_	T. I. M. T. D. I. I. C. D	9/29~9/30	2,800	T * 7
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/18	2,500	LV
		Protection (Koto Ward)	10/18~10/19	2,500	
			10/19~10/20	2,400	
	8	Chichijima Island (Ogasawara Village)	$11/8 \sim 11/9$	2,800	LV
			11/9~11/10	3,100	
			11/10~11/11	2,800	
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$11/8 \sim 11/9$	3,800	LV
			$11/9 \sim 11/10$	3,300	
			11/10~11/11	3,800	
Yokohama City	10	Yokohama Environmental Science Research Institute	10/11~10/12	2,500	LV
		(Yokohama City)	10/12~10/13	2,100	
			10/13~10/14	2,300	
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	2,600	LV
8			9/27~9/28	2,900	
			9/28~9/29	2,700	
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	2,000	LV
royuma rren.		Tonam 7 in Quanty Monitoring Station (Tonam City)	9/13~9/14	1,900	E,
			9/14~9/15	2,400	
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	1,900	LV
Ishikawa 1 ICi.	13	Environmental Science (Kanazawa City)	9/13~9/14	2,000	E,
		Environmental Science (Ranazawa City)	9/14~9/15	2,400	
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	2,100	LV
ı amanasın FTCI.	14	Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$		LV
		Environment (Kotu City)	9/2/~9/28	2,300	
Nagana D£	1.5	No como Environmental Conservation Dec. 1. I. divid		2,400	T 37
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	11/7~11/8	2,300	LV
		(Nagano City)	11/8~11/9	4,300	
C.C. D. C	1.0	Gio P. C. and D.	11/9~11/10	3,200	* * *
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	2,300	LV
		Environmental Sciences (Kakamigahara City)	10/25~10/26	1,900	
			10/26~10/27	1,900	
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/5	2,600	LV
			$10/5 \sim 10/6$	2,200	
			$10/6 \sim 10/7$	2,100	
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	2,000	LV
		(Yokkaichi City)	$10/25\sim 10/26$	1,900	
	L	<u> </u>	10/26~10/27	1,900	
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	2,600	LV
			9/27~9/28	2,300	
	1	1	9/28~9/29	2,700	
		l l	7120 7127	2,700	
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	$\frac{10/11 \sim 10/12}{10/11}$	2,200	LV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)			LV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	2,600	LV
			9/27~9/28	2,500	
			9/28~9/29	2,500	
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	2,300	LV
		(Kobe City)	$10/4 \sim 10/5$	2,300	
			$10/5 \sim 10/6$	2,000	
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	$10/24 \sim 10/25$	2,300	LV
			$10/25 \sim 10/26$	1,800	
			10/26~10/27	1,800	
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	2,000	LV
			10/25~10/26	1,800	
			10/26~10/27	1,800	
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	3,100	LV
·			10/18~10/19	2,100	
			10/19~10/20	1,900	
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/14	2,100	LV
6		Environment (Yamaguchi City)	9/14~9/15	1,900	
		( 3 )/	9/15~9/16	1,700	
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/14	2,100	LV
		(g)	9/14~9/15	1,900	
			9/15~9/16	2,000	ners)
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$		2,400 LV
okusiiiiia i ici.	21	Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$	1,900	
		Environmental Sciences Center (Tokushima City)	$10/26 \sim 10/27$	1,700	
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~9/28	2,600	LV
Xagawa 11ci.	20	Sciences and Public Health (Takamatsu City)	9/28~9/29	2,500	LV
		Sciences and I done I carm (I akamatsa City)	9/29~9/30	2,500	
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	2,700	LV
Jilline I Ici.	2)	(Uwajima City)	11/8~11/9	5,000	LV
		(Owajima City)	11/9~11/10	5,000	
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	3,300	LV
Tukuoka FICI.	30	Official City Government Building (Official City)	$10/4 \sim 10/3$ $10/5 \sim 10/6$	2,300	LV
			$10/6 \sim 10/6$	2,100	
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~9/28	3,100	LV
saga Prei.	31	Saga Prefectural Environmental Research Center (Saga City)	9/28~9/29	2,600	LV
			9/29~9/30	3,000	
Kumamoto Pref.	22	Kumamoto Prefectural Institute of Public Health and	$\frac{9/29}{50}$	2,200	LV
Kumamoto Prei.	32		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		LV
		Environmental Science (Udo City)	11/8~11/9	3,900	
e 1:5 0	22		11/9~11/10	4,700	
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/12	2,200	LV
		Environment (Miyazaki City)	10/12~10/13	2,000	
	2 :		10/13~10/14	2,200	
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	2,900	LV
		and Public Health (Kagoshima City)	9/27~9/28	3,400	
			9/28~9/29	3,300	
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	2,000	LV
			9/27~9/28	2,500	
			$9/28 \sim 9/29$	2,900	

(Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) LV: Low volume air sampler

## [23] Short-chain chlorinated paraffins/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 14/36 (Missing value: 0)
Detection Frequency (sample): 14/36 (Missing value: 0)

Detection limit: \*400 Quantification limit: \*1,100

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	3,400
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
Local communities	INO.		Sampling dates	Measured value	All sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	tr(400)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$   \begin{array}{r}     10/3 \sim 10/4 \\     10/4 \sim 10/5 \\     10/5 \sim 10/6   \end{array} $	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$ $9/29 \sim 9/30$	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	tr(400)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	tr(800)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	1,200	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	tr(1,000)	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9 11/9~11/10 11/10~11/11	nd	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	1,600	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	nd	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	nd	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	tr(400)	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	nd	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	1,300	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	nd	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	nd	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	tr(400)	HV

Local communities	Ma	Manitoned sites	Warm	season	Air commiss
Local communities	No.	Monitored sites	Sampling dates	Measured value	Air sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	10/3~10/4	nd	HV
,		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
11010 1101		Tomit in Quanty Homeing Samen (Tomit City)	$10/25 \sim 10/26$	11.0	
			$10/26 \sim 10/27$		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	$10/24 \sim 10/25$	nd	HV
Similanc 1 Ici.	23	Okt i vational Acid Kain Observatory (Okinosinina Town)	10/24 - 10/25 $10/25 \sim 10/26$	iid.	11 V
Hiroshima City	2.4	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/26~10/27	1	HV
Hirosnima City	24	Hirosnima City Kokutaiji Junior High School (Hirosnima City)	10/17~10/18	nd	ΗV
			10/18~10/19		
			10/19~10/20	(100)	
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	tr(400)	MV
		Environment (Yamaguchi City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	tr(400)	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$	nd	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	9/27~10/4	3,400	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	nd	HV
			10/5~10/6		
			10/6~10/7		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	tr(600)	MV
Sugu I ICI.	31	Sugu Protectural Environmental research Center (Sugu City)	3/2/ 10/1	4(000)	111 1
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
ixamumow i ici.	32	Environmental Science (Udo City)	11/8~11/8	IIG.	11 4
		Environmental Belefice (Odo City)	11/9~11/10		
Miyagalai Daaf	22	Miyazaki Prefectural Institute for Public Healthand	$10/11 \sim 10/18$	t=(000)	MA
Miyazaki Pref.	33		10/11~10/18	tr(800)	MV
		Environment (Miyazaki City)			
T/ 1: D C	2.4	W 1: D C 4 II (14 C D 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0/06 0/07	1	1117
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
		and Public Health (Kagoshima City)	9/27~9/28		
	L		9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

<sup>(</sup>Note 6) \*: Indicates the sum value of the Quantification [Detection] limits of each substance with the same number of carbons in the alkyl group.

## [23-1] Chlorinated decanes/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit : 40 Quantification limit : 110

	Aggregated value
Geometric mean	120
Median	130
Maximum	490
Minimum	tr(40)

Local communities	No.	Monitored sites	Warms	Air sampler	
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	140	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	tr(40)	HV
			10/4~10/5 10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28 9/28~9/29	tr(90)	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/29~9/30 10/24~10/31	tr(100)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	320	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	290	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	270	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	110	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	$ \begin{array}{c} 11/8 \sim 11/9 \\ 11/9 \sim 11/10 \\ 11/10 \sim 11/11 \end{array} $	tr(60)	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	490	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	tr(60)	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	130	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	170	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	190	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	150	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	tr(50)	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	300	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{r}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	tr(40)	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	200	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$ \begin{array}{r} 10/11 \sim 10/12 \\ 10/12 \sim 10/13 \\ 10/13 \sim 10/14 \end{array} $	200	HV

Local communities  Hyogo Pref.	No.	Monitored sites	Sampling dates	Measured value	Air sampler
Hyogo Pref.			1 0		
	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	130	HV
			$9/27 \sim 9/28$		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	190	HV
		(Kobe City)	10/4~10/5		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	tr(60)	HV
			10/25~10/26		
			10/26~10/27	1	
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	tr(50)	HV
			$10/25 \sim 10/26$	` ′	
			10/26~10/27	1	
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	tr(70)	HV
		(Internal City)	10/18~10/19	(, 0)	
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	160	MV
i amaguem i iei.	23	Environment (Yamaguchi City)	7/13 7/20	100	1V1 V
		Environment (Tamaguem City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	170	MV
	20	rragi rreatul and weriate center (tragi City)	9/13/ 9/20	170	IVI V
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	tr(40)	HV
i okusnima Prei.	21	*		tr(40)	нv
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
rr D 0	20	T D 0	10/26~10/27	410	
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	410	MV
		Sciences and Public Health (Takamatsu City)			
E1: D C	20	TI: D C + 1C + 1 D + 10 M	11/7 11/0	. (10)	****
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	tr(40)	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10	(0.0)	
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	tr(90)	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	190	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	tr(60)	HV
		Environmental Science (Udo City)	11/8~11/9	j l	
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	210	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	110	HV
=		and Public Health (Kagoshima City)	9/27~9/28	1	
			9/28~9/29	1	
01: P 6	35	Cape Hedo (Kunigami Village)		tr(100)	HV
Jkinawa Pref.		1 \ 0 \ 0 /		\ ^*/	
Okinawa Pref.			$9/27 \sim 9/28$		
O1: P. C	35	Cape Hedo (Kunigami Village)		tr(100)	HV

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr: Detection limit value and more, less than Quantification limit value.

# [23-2] Chlorinated undecanes/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 22/36 (Missing value: 0)
Detection Frequency (sample): 22/36 (Missing value: 0)

Detection limit: 100 Quantification limit: 300

	Aggregated value
Geometric mean	tr(130)
Median	tr(120)
Maximum	2,400
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
** 11 '1			Sampling dates	Measured value	-
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	tr(170)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
			10/4~10/5 10/5~10/6		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	nd	HV
Iwate I Ici.	3	Sugo Ali Quanty Mointoring Station (Takizawa City)	9/28~9/29	IId	11 V
			9/29~9/30		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$10/24 \sim 10/31$	tr(140)	MV
,g		(Sendai City)		(-1.+)	
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	tr(280)	MV
· ·		City)		, ,	
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	710	MV
		City)			
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	480	MV
		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	tr(230)	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	nd	HV
			11/9~11/10		
** 1 1 6'	10		11/10~11/11	(50	
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	670	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	9/12~9/13	tr(140)	HV
			9/13~9/14		
			9/14~9/15		
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	tr(110)	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
Yamanashi Pref.	1.4	Yamanashi Prefectural Institute of Public Health and	9/14~9/15 9/26~9/27	tu(150)	HV
ı amanasını Prei.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$	tr(150)	ΗV
		Environment (Kota City)	$9/27 \sim 9/28$ $9/28 \sim 9/29$		
Nagano Pref.	15	Nagano Environmental Conservation Research Institute	$\frac{9/28 \sim 9/29}{11/7 \sim 11/14}$	tr(180)	MV
ruguno i ioi.	13	(Nagano City)	11// 11/14	11(100)	IVI V
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
			10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	570	MV
Mio Duof	10	Mic Bucketon Harling 17	10/24 - 10/25	1	TTT 7
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	nd	HV
		(Yokkaichi City)	$10/25 \sim 10/26$		
Vyoto Pif	10	Kyoto Prefecture Joyo Senior High School (Joyo City)	$\frac{10/26 \sim 10/27}{9/26 \sim 9/27}$	tr(110)	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	tr(110)	ΗV
			9/27~9/28 9/28~9/29		
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2	$\frac{9/28 \sim 9/29}{10/11 \sim 10/12}$	tr(170)	HV
Osaka Prel.	19	Annex (Osaka City)	$\frac{10/11\sim10/12}{10/12\sim10/13}$	u(1/0)	пv
		Painter (Osaka City)			
			$10/13 \sim 10/14$		

Local communities	No.	Monitored sites	Warm	season	Air sampler
	140.	Wolntored Sites	Sampling dates	Measured value	An sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	$9/26 \sim 9/27$	tr(100)	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	tr(120)	HV
·		(Kobe City)	$10/4 \sim 10/5$	` ′	
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
Similarie I Ter.	23	OKI I varional Field Fram Observatory (Okinosimia Town)	$10/25 \sim 10/26$	in G	11 '
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/20^{-10/27}}{10/17 \sim 10/18}$	nd	HV
Thoshina City	24	Throshina City Kokutaiji Julioi Tiigii School (Tiiroshinia City)	10/18~10/18	IIG	п v
V 1:D C	25	V 1'D C 4 11 4'4 CD 11' II 14 1	10/19~10/20	. (210)	1477
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	tr(210)	MV
		Environment (Yamaguchi City)			
			0.11.0	(2.0.0)	
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	tr(200)	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	$10/24 \sim 10/25$	nd	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			$10/26 \sim 10/27$		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	2,400	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	$11/7 \sim 11/8$	nd	HV
		(Uwajima City)	$11/8 \sim 11/9$		
			$11/9 \sim 11/10$		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	10/4~10/5	nd	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	9/27~10/4	tr(220)	MV
C				` ′	
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	430	MV
, uzuki 1 101.	33	Environment (Miyazaki City)	10/11 10/10	150	141 4
		(,			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	tr(120)	HV
Kagosiiiiia 1 ici.	34	and Public Health (Kagoshima City)	9/27~9/28	11(120)	11 V
		and I done Health (Nagosiinia City)	9/28~9/29		
Okinawa Pref.	25	Cone Hade (Vymicemi Village)		n.1	1117
Okinawa Prei.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

## [23-3] Chlorinated dodecanes/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 11/36 (Missing value: 0)
Detection Frequency (sample): 11/36 (Missing value: 0)

Detection limit : 120 Quantification limit : 360

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	430
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
	1101		Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	tr(130)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	$10/3 \sim 10/4$ $10/4 \sim 10/5$	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	$   \begin{array}{r}     10/5 \sim 10/6 \\     9/27 \sim 9/28 \\     9/28 \sim 9/29 \\     9/29 \sim 9/30   \end{array} $	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/24~10/31	tr(130)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/26~10/3	tr(170)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	9/27~10/4	tr(200)	MV
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/17~10/24	tr(240)	MV
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9 11/9~11/10 11/10~11/11	nd	HV
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	370	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27 9/27~9/28 9/28~9/29	nd	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Ishikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	$9/12 \sim 9/13$ $9/13 \sim 9/14$ $9/14 \sim 9/15$	nd	HV
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	$9/26 \sim 9/27$ $9/27 \sim 9/28$ $9/28 \sim 9/29$	nd	HV
Nagano Pref.	15	Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	tr(120)	MV
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$ $10/26 \sim 10/27$	nd	HV
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	tr(260)	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	$   \begin{array}{c}     10/24 \sim 10/25 \\     10/25 \sim 10/26 \\     10/26 \sim 10/27   \end{array} $	nd	HV
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27 9/27~9/28 9/28~9/29	nd	HV
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$10/11 \sim 10/12$ $10/12 \sim 10/13$ $10/13 \sim 10/14$	nd	HV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			9/27~9/28		
			9/28~9/29		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV
		(Kobe City)	$10/4 \sim 10/5$		
			10/5~10/6		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	nd	HV
		(Thousand only)	10/18~10/19		
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
i amaguem i ici.	23	Environment (Yamaguchi City)	J113 - 312U	iid	1 <b>v1 v</b>
		Environment (Tamaguem City)			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
	20	Tragi Treatur and Werrare Center (Tragi City)	9/13/ 9/20	IIG	IVI V
F-11-: D£	27	Talanahiana Danfartanal Dahlia Haritah Dhamasa anti-alan d	10/24 - 10/25	1	HV
Γokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	nd	HV
		Environmental Sciences Center (Tokushima City)	10/25~10/26		
			10/26~10/27	4.5.0	
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	430	MV
		Sciences and Public Health (Takamatsu City)			
			11.5		
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	nd	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	tr(140)	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	11/7~11/8	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	tr(140)	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
	-	and Public Health (Kagoshima City)	9/27~9/28		-117
		(Language City)	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
Aniawa 1101.	33	Cape Hedo (Ranigaini vinage)	9/27~9/28	IIG	11 4
			9/28~9/29		
	1		9/20.09/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more. (Note 3) HV: High volume air sampler, MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr: Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

## [23-4] Chlorinated tridecanes/air (pg/m<sup>3</sup>)

Monitored year: 2022

Detection Frequency (site): 3/36 (Missing value: 0)
Detection Frequency (sample): 3/36 (Missing value: 0)

Detection limit : 110 Quantification limit : 330

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(190)
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	nd	HV
			$10/4 \sim 10/5$		
			$10/5 \sim 10/6$		
wate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28	nd	HV
			$9/28 \sim 9/29$ $9/29 \sim 9/30$		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$\frac{9/29 \sim 9/30}{10/24 \sim 10/31}$	nd	MV
viryagi i ici.	'	(Sendai City)	10/24 10/31	nd	1 <b>V1</b> V
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	nd	MV
8		City)	,,_,		
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	nd	MV
		City)			
Гокуо Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	nd	MV
		Protection (Koto Ward)			
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	nd	MV
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	nd	HV
			11/9~11/10		
			11/10~11/11		
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	tr(120)	MV
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	nd	HV
			9/27~9/28		
P. C	10	The state of the Market State of the state o	9/28~9/29	1	****
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12\sim 9/13$ $9/13\sim 9/14$	nd	HV
			9/14~9/15		
shikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	nd	HV
		Environmental Science (Kanazawa City)	9/13~9/14		
			9/14~9/15		
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	nd	HV
		Environment (Kofu City)	9/27~9/28		
Nagano Pref.	1.5	Nagano Environmental Conservation Research Institute	9/28~9/29 11/7~11/14	4	MV
Nagano Prei.	15	(Nagano City)	11//~11/14	nd	IVI V
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	nd	HV
		Environmental Sciences (Kakamigahara City)	10/25~10/26		
		, , ,	10/26~10/27		
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	tr(130)	MV
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	nd	HV
·110 1 101.	10	(Yokkaichi City)	$10/24 \sim 10/25$ $10/25 \sim 10/26$	IIU	11 V
			10/26~10/27		
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	nd	HV
			9/27~9/28		
2.1.2.0	10	0.1.1.1.0.6.1.10	9/28~9/29		****
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$\frac{10/11 \sim 10/12}{10/12 \sim 10/13}$	nd	HV
		LADDEY (LICAVALITY)	$10/17 \sim 10/13$		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	nd	HV
			9/27~9/28		
			$9/28 \sim 9/29$		
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	nd	HV
		(Kobe City)	10/4~10/5		
			$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	10/24~10/25	nd	HV
			10/25~10/26		
			10/26~10/27		
Shimane Pref.	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	nd	HV
			10/25~10/26		
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	$\frac{10/28 - 10/27}{10/17 \sim 10/18}$	nd	HV
Tinosinna City	2-7	Throshina City Rokataiji Jamoi Tiigii School (Tiroshina City)	10/18~10/19	na	11.4
			$\frac{10/18 - 10/19}{10/19 \sim 10/20}$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	nd	MV
i amagucin Fiel.	23	Environment (Yamaguchi City)	9/13/ - 9/20	IIG	IVI V
		Environment (Tamaguchi City)			
	26	H : H 14 1W10 C + (H : C')	9/13~9/20	1	107
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	nd	MV
m 1 1: p 2			10/01 10/07		****
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	nd	HV
		Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$		
			10/26~10/27		
Kagawa Pref.	28	Kagawa Prefectural Research Institute for Environmental	$9/27 \sim 10/4$	tr(190)	MV
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	nd	HV
		(Uwajima City)	11/8~11/9		
			11/9~11/10		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	nd	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	nd	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	nd	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10		
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	nd	MV
•		Environment (Miyazaki City)			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	nd	HV
	5-7	and Public Health (Kagoshima City)	9/27~9/28	110	11 1
		and I done Health (Rugosinia City)	9/28~9/29		
Okinawa Pref.	35	Cape Hedo (Kunigami Village)	9/26~9/27	nd	HV
OKIIIAWA FICI.	33	Cape ricuo (Kuniganii vinage)	9/27~9/28	IIu	11 V
			9/28~9/29		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

<sup>(</sup>Note 2) Data treated as detected means detection limit value and more.

<sup>(</sup>Note 3) HV: High volume air sampler , MV: Medium volume air sampler.

<sup>(</sup>Note 4) tr : Detection limit value and more, less than Quantification limit value.

<sup>(</sup>Note 5) nd: Not detected

### [25] Perfluorohexane sulfonic acid (PFHxS)/air (pg/m³)

Monitored year: 2022

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit : 0.04 Quantification limit : 0.11

	Aggregated value
Geometric mean	3.1
Median	3.2
Maximum	7.0
Minimum	0.79

Local communities	No.	Monitored sites	Warms		Air sampler	
			Sampling dates	Measured value		
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/4~10/11	5.9	MV	
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/3~10/4	1.9	HV	
			10/4~10/5			
			10/5~10/6			
wate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/27~9/28 9/28~9/29	1.4	HV	
			$9/28 \sim 9/29$ $9/29 \sim 9/30$			
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	$10/24 \sim 10/31$	7.0	MV	
, ,		(Sendai City)				
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/26~10/3	6.0	MV	
		City)				
baraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	9/27~10/4	6.6	MV	
		City)				
Tokyo Met.	7	Tokyo Metropolitan Research Institute for Environmental	10/17~10/24	5.6	MV	
·		Protection (Koto Ward)				
	8	Chichijima Island (Ogasawara Village)	11/8~11/15	6.5	MV	
Kanagawa Pref.	9	Kanagawa Environmental Research Center (Hiratsuka City)	11/8~11/9	1.2	HV	
8		``````	11/9~11/10			
			11/10~11/11			
Yokohama City	10	Yokohama Environmental Science Research Institute (Yokohama City)	10/11~10/18	4.5	MV	
Niigata Pref.	11	Oyama Air Quality Monitoring Station (Niigata City)	9/26~9/27	3.4	HV	
			9/27~9/28			
			9/28~9/29			
Гоуата Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	$9/12\sim9/13$ $9/13\sim9/14$	2.6	HV	
			9/13/09/14			
shikawa Pref.	13	Ishikawa Prefectural Institute of Public Health and	9/12~9/13	3.2	HV	
		Environmental Science (Kanazawa City)	9/13~9/14			
			9/14~9/15			
Yamanashi Pref.	14	Yamanashi Prefectural Institute of Public Health and	9/26~9/27	1.8	HV	
		Environment (Kofu City)	9/27~9/28			
Nagano Pref.	1.5	Nagano Environmental Conservation Research Institute	9/28~9/29	1.2	3.07	
Nagano Prei.	15	(Nagano Environmental Conservation Research Institute (Nagano City)	11/7~11/14	4.3	MV	
Gifu Pref.	16	Gifu Prefectural Research Institute for Health and	10/24~10/25	1.6	HV	
	-	Environmental Sciences (Kakamigahara City)	$10/25 \sim 10/26$	-		
		, , , ,	10/26~10/27			
Nagoya City	17	Chikusa Ward Heiwa Park (Nagoya City)	10/4~10/11	4.4	MV	
Mie Pref.	18	Mie Prefecture Health and Environment Research Institute	10/24~10/25	2.4	HV	
·110 1 101.	10	(Yokkaichi City)	$10/24 - 10/25$ $10/25 \sim 10/26$	۷.٦	11 V	
			10/26~10/27			
Kyoto Prif.	19	Kyoto Prefecture Joyo Senior High School (Joyo City)	9/26~9/27	1.9	HV	
			9/27~9/28			
2.1.2.0	10	0.1.1.1.0.6.1.10	9/28~9/29	2.1	****	
Osaka Pref.	19	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	$\frac{10/11 \sim 10/12}{10/12 \sim 10/13}$	2.4	HV	
		LADUCA OLISAKA U UVI	$10/17 \sim 10/13$			

Local communities	No.	Monitored sites	Warm season		A in gamenta:
	INO.	iviointored sites	Sampling dates	Measured value	Air sampler
Hyogo Pref.	20	Hyogo Prefectural Environmental Research Center (Kobe City)	9/26~9/27	3.0	HV
			9/27~9/28		
			9/28~9/29	1	
Kobe City	21	Kobe City Institute of Health and Environmental Sciences	$10/3 \sim 10/4$	2.5	HV
		(Kobe City)	$10/4 \sim 10/5$		
		(Rose Chy)	$10/5 \sim 10/6$		
Nara Pref.	22	Tenri Air Quality Monitoring Station (Tenri City)	$\frac{10/3}{10/24} \sim 10/25$	1.7	HV
	22	Telli Ali Quality Monitoring Station (Telli City)	10/24 - 10/25 $10/25 \sim 10/26$	1./	11 V
Shimane Pref.	22	OLINIA IA IID I OLI III TI I	10/26~10/27	1.7	1137
	23	Oki National Acid Rain Observatory (Okinoshima Town)	10/24~10/25	1.7	HV
			10/25~10/26		
			$10/26 \sim 10/27$		
Hiroshima City	24	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	10/17~10/18	1.7	HV
			10/18~10/19		
			$10/19 \sim 10/20$		
Yamaguchi Pref.	25	Yamaguchi Prefectural Institute of Public Health and	9/13~9/20	5.2	MV
		Environment (Yamaguchi City)			
		, , ,			
	26	Hagi Health and Welfare Center (Hagi City)	9/13~9/20	5.3	MV
Tokushima Pref.	27	Tokushima Prefectural Public Health, Pharmaceutical and	10/24~10/25	2.2	HV
	21	Environmental Sciences Center (Tokushima City)	$10/25 \sim 10/26$	2.2	11 4
		Environmental Sciences Center (Tokushima City)			
Kagawa Pref.	20	V	$\frac{10/26\sim10/27}{9/27\sim10/4}$	6.4	MV
	28	Kagawa Prefectural Research Institute for Environmental	$9/2/\sim 10/4$	0.4	IVI V
		Sciences and Public Health (Takamatsu City)			
Ehime Pref.	20	El: D C + 1C + 1 D : 10 M	11/7 11/0	1.6	1117
	29	Ehime Prefectural Government Nanyo Regional Office	11/7~11/8	1.6	HV
		(Uwajima City)	11/8~11/9		
			$11/9 \sim 11/10$		
Fukuoka Pref.	30	Omuta City Government Building (Omuta City)	$10/4 \sim 10/5$	3.1	HV
			$10/5 \sim 10/6$		
			$10/6 \sim 10/7$		
Saga Pref.	31	Saga Prefectural Environmental Research Center (Saga City)	$9/27 \sim 10/4$	5.7	MV
Kumamoto Pref.	32	Kumamoto Prefectural Institute of Public Health and	$11/7 \sim 11/8$	0.79	HV
		Environmental Science (Udo City)	11/8~11/9		
			11/9~11/10	1	
Miyazaki Pref.	33	Miyazaki Prefectural Institute for Public Healthand	10/11~10/18	4.9	MV
		Environment (Miyazaki City)			
		(, u, u, u, )			
Kagoshima Pref.	34	Kagoshima Prefectural Institute for Environmental Research	9/26~9/27	3.3	HV
	34	and Public Health (Kagoshima City)	9/27~9/28	3.3	11 V
		and I done Health (Nagoshinia City)			
Okinawa Pref.	2.5	C H 1 (K ; ; Kill )	9/28~9/29	4.4	7737
	35	Cape Hedo (Kunigami Village)	9/26~9/27	4.4	HV
			9/27~9/28		
			$9/28 \sim 9/29$		

<sup>(</sup>Note 1) Detection frequency (site) is based on the number of sites, thus means (the number of detected sites/the number of surveyed sites).

Detection frequency (sample) is based on the number of samples, thus means (the number of detected samples/the number of surveyed samples).

(Note 2) Data treated as detected means detection limit value and more.