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

Monitored year :2018

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

Detection limit: *5 Quantification limit: *14

	stats
Geometric mean	150
Median	140
Maximum	2,600
Minimum	tr(11)

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	180
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	19
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	63
Akita Pref.	4	Lake Hachiro	60
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	25
Fukushima Pref.	6	Onahama Port	190
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	100
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	120
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	97
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	150
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	480
ĺ	12	Mouth of Riv. Sumida (Minato Ward)	2,600
Yokohama City	13	Yokohama Port	530
Kawasaki City	14	Keihin Canal, Port of Kawasaki	860
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	340
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	550
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	1,000
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	2,500
Nagano Pref.	19	Lake Suwa (center)	91
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	43
Aichi Pref.	21	Nagoya Port	650
Mie Pref.	22	Yokkaichi Port	220
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	70
Kyoto Pref.	24	Miyazu Port	29
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	770
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	640
Osaka City	27	Osaka Port	2,000
Hyogo Pref.	28	Offshore of Himeji	140
Kobe City	29	Kobe Port (center)	1,600
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	290
Okayama Pref.	31	Offshore of Mizushima	120
Hiroshima Pref.	32	Kure Port	240
	33	Hiroshima Bay	95
Yamaguchi Pref.	34	Tokuyama Bay	51
	35	Offshore of Ube	39
	36	Offshore of Hagi	28
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	35
Kagawa Pref.	38	Takamatsu Port	380
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	tr(11)
Kitakyushu City	40	Dokai Bay	1,200
Saga Pref.	41	Imari Bay	38
Nagasaki Pref.	42	Omura Bay	16
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	170
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	29
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	14
5	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	23
Okinawa Pref.	47	Naha Port	830

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

⁽Note 4) *: indicates the sum value of the Quantification [Detection] limits of each congener.

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

Monitored year :2018

Detection Frequency (site): 38/47 (Missing value: 0)
Detection Frequency (sample): 38/47 (Missing value: 0)

Detection limit: 0.3 Quantification limit: 0.7

	stats
Geometric mean	0.9
Median	1.0
Maximum	480
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.4
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(0.4)
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	3.9
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	0.7
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.5)
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	1.4
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(0.5)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	0.9
	12	Mouth of Riv. Sumida (Minato Ward)	2.0
Yokohama City	13	Yokohama Port	1.1
Kawasaki City	14	Keihin Canal, Port of Kawasaki	1.6
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	1.1
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	480
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(0.5)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	10
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	tr(0.6)
Aichi Pref.	21	Nagoya Port	1.0
Mie Pref.	22	Yokkaichi Port	tr(0.3)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	0.7
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	2.3
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	1.2
Osaka City	27	Osaka Port	0.8
Hyogo Pref.	28	Offshore of Himeji	0.7
Kobe City	29	Kobe Port (center)	2.2
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1.7
Okayama Pref.	31	Offshore of Mizushima	1.1
Hiroshima Pref.	32	Kure Port	1.0
	33	Hiroshima Bay	1.0
Yamaguchi Pref.	34	Tokuyama Bay	12
	35	Offshore of Ube	1.0
	36	Offshore of Hagi	1.9
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	1.0
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	6.4
Saga Pref.	41	Imari Bay	tr(0.3)
Nagasaki Pref.	42	Omura Bay	4.0
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	1.2
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(0.5)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
<u> </u>	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	3.7

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 47/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 47/47\ (Missing\ value: 0)$

Detection limit : 1 Quantification limit : 3

	stats
Geometric mean	20
Median	18
Maximum	450
Minimum	3

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	17
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	4
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	18
Akita Pref.	4	Lake Hachiro	6
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	4
Fukushima Pref.	6	Onahama Port	40
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	20
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	26
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	25
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	16
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	42
ĺ	12	Mouth of Riv. Sumida (Minato Ward)	140
Yokohama City	13	Yokohama Port	24
Kawasaki City	14	Keihin Canal, Port of Kawasaki	38
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	27
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	29
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	240
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	450
Nagano Pref.	19	Lake Suwa (center)	6
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	14
Aichi Pref.	21	Nagoya Port	71
Mie Pref.	22	Yokkaichi Port	80
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	5
Kyoto Pref.	24	Mivazu Port	9
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	140
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	65
Osaka City	27	Osaka Port	120
Hyogo Pref.	28	Offshore of Himeji	18
Kobe City	29	Kobe Port (center)	63
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	50
Okayama Pref.	31	Offshore of Mizushima	21
Hiroshima Pref.	32	Kure Port	15
	33	Hiroshima Bay	14
Yamaguchi Pref.	34	Tokuyama Bay	13
	35	Offshore of Ube	8
	36	Offshore of Hagi	9
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	6
Kagawa Pref.	38	Takamatsu Port	16
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	3
Kitakyushu City	40	Dokai Bay	38
Saga Pref.	41	Imari Bay	8
Nagasaki Pref.	42	Omura Bay	5
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	20
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	7
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	4
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	5
Okinawa Pref.	47	Naha Port	46

(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.

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

Monitored year :2018

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

Detection limit: 1 Quantification limit: 3

	stats
Geometric mean	31
Median	28
Maximum	900
Minimum	tr(1)

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	14
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	4
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	15
Akita Pref.	4	Lake Hachiro	4
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	4
Fukushima Pref.	6	Onahama Port	61
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	19
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	28
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	23
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	44
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	110
ĺ	12	Mouth of Riv. Sumida (Minato Ward)	900
Yokohama City	13	Yokohama Port	140
Kawasaki City	14	Keihin Canal, Port of Kawasaki	240
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	51
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	14
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	470
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	800
Nagano Pref.	19	Lake Suwa (center)	8
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	7
Aichi Pref.	21	Nagoya Port	170
Mie Pref.	22	Yokkaichi Port	50
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	10
Kyoto Pref.	24	Mivazu Port	6
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	230
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	260
Osaka City	27	Osaka Port	640
Hyogo Pref.	28	Offshore of Himeji	42
Kobe City	29	Kobe Port (center)	310
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	77
Okayama Pref.	31	Offshore of Mizushima	31
Hiroshima Pref.	32	Kure Port	40
	33	Hiroshima Bay	23
Yamaguchi Pref.	34	Tokuyama Bay	9
	35	Offshore of Ube	6
	36	Offshore of Hagi	5
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	6
Kagawa Pref.	38	Takamatsu Port	160
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	3
Kitakyushu City	40	Dokai Bay	260
Saga Pref.	41	Imari Bay	9
Nagasaki Pref.	42	Omura Bay	tr(1)
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	44
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	6
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(1)
120500000000000000000000000000000000000	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	6
Okinawa Pref.	47	Naha Port	180

⁽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.

⁽Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 47/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 47/47\ (Missing\ value: 0)$

Detection limit: 0.5 Quantification limit: 1.5

	stats
Geometric mean	33
Median	28
Maximum	1,100
Minimum	2.0

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	20
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	3.1
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	12
Akita Pref.	4	Lake Hachiro	9.2
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	5.8
Fukushima Pref.	6	Onahama Port	40
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	28
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	28
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	18
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	50
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	150
	12	Mouth of Riv. Sumida (Minato Ward)	1,000
Yokohama City	13	Yokohama Port	190
Kawasaki City	14	Keihin Canal, Port of Kawasaki	300
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	65
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	11
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	220
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1,100
Nagano Pref.	19	Lake Suwa (center)	21
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	9.6
Aichi Pref.	21	Nagoya Port	210
Mie Pref.	22	Yokkaichi Port	51
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	17
Kyoto Pref.	24	Miyazu Port	5.2
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	190
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	170
Osaka City	27	Osaka Port	790
Hyogo Pref.	28	Offshore of Himeji	33
Kobe City	29	Kobe Port (center)	380
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	65
Okayama Pref.	31	Offshore of Mizushima	24
Hiroshima Pref.	32	Kure Port	51
	33	Hiroshima Bay	22
Yamaguchi Pref.	34	Tokuyama Bay	6.5
	35	Offshore of Ube	7.9
	36	Offshore of Hagi	3.8
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	8.8
Kagawa Pref.	38	Takamatsu Port	130
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	2.0
Kitakyushu City	40	Dokai Bay	530
Saga Pref.	41	Imari Bay	6.9
Nagasaki Pref.	42	Omura Bay	3.5
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	49
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	4.4
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	2.4
<u> </u>	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	5.2
Okinawa Pref.	47	Naha Port	170

(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)/surface water (pg/L)

Monitored year :2018

Detection Frequency (site): 29/47 (Missing value: 0)
Detection Frequency (sample): 29/47 (Missing value: 0)

Detection limit: 0.3 Quantification limit: 0.8

	stats
Geometric mean	tr(0.5)
Median	tr(0.5)
Maximum	9.1
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.5)
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	tr(0.3)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	tr(0.7)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.5)
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	tr(0.3)
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(0.5)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	2.3
	12	Mouth of Riv. Sumida (Minato Ward)	9.1
Yokohama City	13	Yokohama Port	1.2
Kawasaki City	14	Keihin Canal, Port of Kawasaki	2.3
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	1.8
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	1.8
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.5)
Nagano Pref.	19	Lake Suwa (center)	tr(0.4)
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	2.0
Mie Pref.	22	Yokkaichi Port	tr(0.6)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	tr(0.6)
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1.9
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	1.4
Osaka City	27	Osaka Port	6.7
Hyogo Pref.	28	Offshore of Himeji	tr(0.5)
Kobe City	29	Kobe Port (center)	3.6
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	2.5
Okayama Pref.	31	Offshore of Mizushima	tr(0.5)
Hiroshima Pref.	32	Kure Port	tr(0.5)
	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)	nd
Kagawa Pref.	38	Takamatsu Port	1.5
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	5.0
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	0.8
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
ĭ	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	0.9

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 3/47 (Missing value: 0) Detection Frequency (sample): 3/47 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.6

	stats
Geometric mean	nd
Median	nd
Maximum	tr(0.5)
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
-	12	Mouth of Riv. Sumida (Minato Ward)	tr(0.2)
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	tr(0.5)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	tr(0.5)
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

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 47/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 47/47\ (Missing\ value: 0)$

Detection limit : 0.3 Quantification limit : 0.8

	stats
Geometric mean	25
Median	22
Maximum	400
Minimum	1.4

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	51
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	5.2
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	9.4
Akita Pref.	4	Lake Hachiro	22
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	6.7
Fukushima Pref.	6	Onahama Port	25
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	22
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	20
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	17
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	26
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	110
,	12	Mouth of Riv. Sumida (Minato Ward)	400
Yokohama City	13	Yokohama Port	110
Kawasaki City	14	Keihin Canal, Port of Kawasaki	190
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	92
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	7.7
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	77
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	110
Nagano Pref.	19	Lake Suwa (center)	30
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	7.9
Aichi Pref.	21	Nagoya Port	140
Mie Pref.	22	Yokkaichi Port	27
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	22
Kyoto Pref.	24	Mivazu Port	3.8
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	130
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	95
Osaka City	27	Osaka Port	330
Hyogo Pref.	28	Offshore of Himeji	22
Kobe City	29	Kobe Port (center)	340
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	47
Okayama Pref.	31	Offshore of Mizushima	16
Hiroshima Pref.	32	Kure Port	61
	33	Hiroshima Bay	18
Yamaguchi Pref.	34	Tokuyama Bay	4.3
	35	Offshore of Ube	6.1
	36	Offshore of Hagi	2.9
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	8.6
Kagawa Pref.	38	Takamatsu Port	39
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	2.0
Kitakyushu City	40	Dokai Bay	220
Saga Pref.	41	Imari Bay	4.6
Nagasaki Pref.	42	Omura Bay	1.4
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	33
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	5.4
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	4.2
5	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	3.8
Okinawa Pref.	47	Naha Port	130

(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)/surface water (pg/L)

Monitored year :2018

Detection Frequency (site): 42/47 (Missing value: 0)
Detection Frequency (sample): 42/47 (Missing value: 0)

Detection limit: 0.3 Quantification limit: 0.7

	stats
Geometric mean	1.2
Median	1.2
Maximum	13
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	2.8
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	tr(0.4)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(0.3)
Akita Pref.	4	Lake Hachiro	1.1
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(0.4)
Fukushima Pref.	6	Onahama Port	1.8
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1.0
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	1.5
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	1.1
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	1.2
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	4.2
	12	Mouth of Riv. Sumida (Minato Ward)	13
Yokohama City	13	Yokohama Port	4.4
Kawasaki City	14	Keihin Canal, Port of Kawasaki	9.0
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	6.4
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.4)
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	4.0
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.5
Nagano Pref.	19	Lake Suwa (center)	1.2
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	tr(0.5)
Aichi Pref.	21	Nagoya Port	6.2
Mie Pref.	22	Yokkaichi Port	1.3
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	1.4
Kyoto Pref.	24	Miyazu Port	tr(0.3)
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	6.1
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	4.8
Osaka City	27	Osaka Port	13
Hyogo Pref.	28	Offshore of Himeji	1.0
Kobe City	29	Kobe Port (center)	9.8
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	2.8
Okayama Pref.	31	Offshore of Mizushima	0.7
Hiroshima Pref.	32	Kure Port	1.3
	33	Hiroshima Bay	tr(0.5)
Yamaguchi Pref.	34	Tokuyama Bay	nd
	35	Offshore of Ube	tr(0.3)
	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	tr(0.5)
Kagawa Pref.	38	Takamatsu Port	2.7
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	12
Saga Pref.	41	Imari Bay	tr(0.3)
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	2.3
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(0.3)
Okinawa Pref.	47	Naha Port	3.4

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 8/47 (Missing value: 0)
Detection Frequency (sample): 8/47 (Missing value: 0)

Detection limit: 0.3 Quantification limit: 0.8

	stats
Geometric mean	nd
Median	nd
Maximum	1.0
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
·	12	Mouth of Riv. Sumida (Minato Ward)	1.0
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	tr(0.5)
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(0.5)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	tr(0.3)
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	tr(0.4)
Osaka City	27	Osaka Port	tr(0.5)
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(0.5)
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	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
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 47/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 47/47\ (Missing\ value: 0)$

Detection limit : 0.05 Quantification limit : 0.13

	stats
Geometric mean	3.5
Median	3.4
Maximum	45
Minimum	0.29

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	7.0
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	1.1
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	1.3
Akita Pref.	4	Lake Hachiro	3.3
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	1.1
Fukushima Pref.	6	Onahama Port	4.3
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.8
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	3.1
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	2.5
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	3.4
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	9.3
·	12	Mouth of Riv. Sumida (Minato Ward)	45
Yokohama City	13	Yokohama Port	16
Kawasaki City	14	Keihin Canal, Port of Kawasaki	33
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	16
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1.1
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	9.1
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	3.4
Nagano Pref.	19	Lake Suwa (center)	3.1
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	1.3
Aichi Pref.	21	Nagoya Port	18
Mie Pref.	22	Yokkaichi Port	4.4
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	3.4
Kyoto Pref.	24	Miyazu Port	0.64
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	15
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	13
Osaka City	27	Osaka Port	44
Hyogo Pref.	28	Offshore of Himeji	3.5
Kobe City	29	Kobe Port (center)	41
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	7.9
Okayama Pref.	31	Offshore of Mizushima	2.3
Hiroshima Pref.	32	Kure Port	5.7
	33	Hiroshima Bay	2.1
Yamaguchi Pref.	34	Tokuyama Bay	0.46
	35	Offshore of Ube	0.92
	36	Offshore of Hagi	0.44
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	0.99
Kagawa Pref.	38	Takamatsu Port	7.5
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	0.40
Kitakyushu City	40	Dokai Bay	32
Saga Pref.	41	Imari Bay	0.80
Nagasaki Pref.	42	Omura Bay	0.29
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	5.3
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	1.3
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	0.86
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	0.74
Okinawa Pref.	47	Naha Port	12

(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)/surface water (pg/L)

Monitored year :2018

Detection Frequency (site) : 14/47 (Missing value : 0)
Detection Frequency (sample) : 14/47 (Missing value : 0)

Detection limit : 0.2 Quantification limit : 0.6

	stats
Geometric mean	nd
Median	nd
Maximum	0.8
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(0.4)
·	12	Mouth of Riv. Sumida (Minato Ward)	0.8
Yokohama City	13	Yokohama Port	tr(0.3)
Kawasaki City	14	Keihin Canal, Port of Kawasaki	tr(0.5)
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	tr(0.4)
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(0.2)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	tr(0.4)
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(0.4)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	tr(0.3)
Osaka City	27	Osaka Port	0.7
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	tr(0.5)
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	nd
	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)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	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
Ĭ	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	tr(0.2)

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site) : 16/47 (Missing value : 0)
Detection Frequency (sample) : 16/47 (Missing value : 0)

Detection limit : 0.1 Quantification limit : 0.3

	stats
Geometric mean	nd
Median	nd
Maximum	0.3
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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(0.1)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(0.2)
·	12	Mouth of Riv. Sumida (Minato Ward)	0.3
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	tr(0.1)
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	0.3
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(0.1)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.1)
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(0.1)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	tr(0.1)
Osaka City	27	Osaka Port	tr(0.1)
Hyogo Pref.	28	Offshore of Himeji	tr(0.1)
Kobe City	29	Kobe Port (center)	tr(0.1)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	0.3
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	tr(0.2)
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(0.1)
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
	47	Naha Port	tr(0.1)

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 47/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 47/47\ (Missing\ value: 0)$

Detection limit : 0.3 Quantification limit : 0.8

	stats
Geometric mean	15
Median	13
Maximum	320
Minimum	1.0

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	49
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	3.1
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	5.8
Akita Pref.	4	Lake Hachiro	15
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	3.7
Fukushima Pref.	6	Onahama Port	14
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	12
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	11
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	10
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	10
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	51
,	12	Mouth of Riv. Sumida (Minato Ward)	110
Yokohama City	13	Yokohama Port	49
Kawasaki City	14	Keihin Canal, Port of Kawasaki	76
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	72
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	3.6
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	28
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	13
Nagano Pref.	19	Lake Suwa (center)	20
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	4.1
Aichi Pref.	21	Nagoya Port	45
Mie Pref.	22	Yokkaichi Port	12
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	13
Kyoto Pref.	24	Mivazu Port	3.5
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	62
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	42
Osaka City	27	Osaka Port	120
Hyogo Pref.	28	Offshore of Himeji	15
Kobe City	29	Kobe Port (center)	320
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	34
Okayama Pref.	31	Offshore of Mizushima	18
Hiroshima Pref.	32	Kure Port	50
	33	Hiroshima Bay	13
Yamaguchi Pref.	34	Tokuyama Bay	4.4
Ŭ	35	Offshore of Ube	6.3
	36	Offshore of Hagi	3.4
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	4.9
Kagawa Pref.	38	Takamatsu Port	23
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	1.0
Kitakyushu City	40	Dokai Bay	76
Saga Pref.	41	Imari Bay	5.6
Nagasaki Pref.	42	Omura Bay	1.0
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	18
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	4.5
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	2.8
5	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	2.6
Okinawa Pref.	47	Naha Port	170

(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)/surface water (pg/L)

Monitored year :2018

Detection Frequency (site): 41/47 (Missing value: 0)
Detection Frequency (sample): 41/47 (Missing value: 0)

Detection limit : 0.1 Quantification limit : 0.3

	stats
Geometric mean	0.3
Median	0.3
Maximum	3.1
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.0
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	tr(0.1)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(0.1)
Akita Pref.	4	Lake Hachiro	0.4
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(0.1)
Fukushima Pref.	6	Onahama Port	0.5
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(0.2)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	0.4
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	0.3
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(0.2)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	1.1
·	12	Mouth of Riv. Sumida (Minato Ward)	2.3
Yokohama City	13	Yokohama Port	0.7
Kawasaki City	14	Keihin Canal, Port of Kawasaki	1.5
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	1.9
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.1)
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	0.9
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	0.3
Nagano Pref.	19	Lake Suwa (center)	0.4
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	tr(0.1)
Aichi Pref.	21	Nagoya Port	1.0
Mie Pref.	22	Yokkaichi Port	tr(0.2)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	0.3
Kyoto Pref.	24	Miyazu Port	tr(0.1)
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1.7
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	1.1
Osaka City	27	Osaka Port	2.1
Hyogo Pref.	28	Offshore of Himeji	0.3
Kobe City	29	Kobe Port (center)	3.1
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1.0
Okayama Pref.	31	Offshore of Mizushima	tr(0.2)
Hiroshima Pref.	32	Kure Port	0.5
	33	Hiroshima Bay	tr(0.2)
Yamaguchi Pref.	34	Tokuyama Bay	nd
, , , , , , , , , , , , , , , , , , ,	35	Offshore of Ube	tr(0.1)
	36	Offshore of Hagi	tr(0.1)
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	tr(0.2)
Kagawa Pref.	38	Takamatsu Port	0.6
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	1.3
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	0.5
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(0.1)
-	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	1.7

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site) : 16/47 (Missing value : 0)
Detection Frequency (sample) : 16/47 (Missing value : 0)

Detection limit : 0.2 Quantification limit : 0.6

	stats
Geometric mean	nd
Median	nd
Maximum	0.7
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.2)
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(0.4)
,	12	Mouth of Riv. Sumida (Minato Ward)	0.6
Yokohama City	13	Yokohama Port	tr(0.2)
Kawasaki City	14	Keihin Canal, Port of Kawasaki	tr(0.4)
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	0.7
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(0.2)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	tr(0.3)
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	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	0.6
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	tr(0.4)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(0.3)
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	nd
Kagawa Pref.	38	Takamatsu Port	tr(0.2)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	tr(0.3)
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(0.2)
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(0.3)

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 24/47 (Missing value: 0)
Detection Frequency (sample): 24/47 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.5

	stats
Geometric mean	tr(0.2)
Median	tr(0.2)
Maximum	1.6
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	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	tr(0.2)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	tr(0.2)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.2)
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	0.6
_	12	Mouth of Riv. Sumida (Minato Ward)	1.1
Yokohama City	13	Yokohama Port	tr(0.4)
Kawasaki City	14	Keihin Canal, Port of Kawasaki	0.9
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	1.0
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(0.3)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.2)
Nagano Pref.	19	Lake Suwa (center)	tr(0.2)
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	0.5
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	tr(0.2)
Kvoto Pref.	24	Mivazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	0.7
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	0.5
Osaka City	27	Osaka Port	1.0
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	1.6
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	tr(0.2)
	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)	nd
Kagawa Pref.	38	Takamatsu Port	tr(0.3)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	0.8
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(0.2)
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
124500111114 1 101.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	0.9

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 2/47 (Missing value: 0) Detection Frequency (sample): 2/47 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.6

	stats
Geometric mean	nd
Median	nd
Maximum	tr(0.3)
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
, i	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	tr(0.3)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
g	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 Bav	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
Tragosimia i ici.	46	Gotanda-bashi Bridge, Riv. Amori (Rhishinia City) Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	tr(0.2)

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 41/47 (Missing value: 0)
Detection Frequency (sample): 41/47 (Missing value: 0)

Detection limit : 0.6 Quantification limit : 1.5

	stats
Geometric mean	3.9
Median	3.8
Maximum	170
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	24
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	1.9
Akita Pref.	4	Lake Hachiro	2.8
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(0.6)
Fukushima Pref.	6	Onahama Port	4.2
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.1
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	3.3
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	2.2
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	2.7
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	11
_	12	Mouth of Riv. Sumida (Minato Ward)	23
Yokohama City	13	Yokohama Port	14
Kawasaki City	14	Keihin Canal, Port of Kawasaki	14
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	20
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.6)
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	7.0
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	4.3
Nagano Pref.	19	Lake Suwa (center)	5.2
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	7.7
Mie Pref.	22	Yokkaichi Port	2.7
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	2.5
Kyoto Pref.	24	Mivazu Port	tr(1.1)
Kyoto City	25	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	11
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	10
Osaka City	27	Osaka Port	28
Hyogo Pref.	28	Offshore of Himeji	4.7
Kobe City	29	Kobe Port (center)	170
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	14
Okayama Pref.	31	Offshore of Mizushima	8.1
Hiroshima Pref.	32	Kure Port	19
_	33	Hiroshima Bay	3.8
Yamaguchi Pref.	34	Tokuyama Bay	1.9
	35	Offshore of Ube	3.2
	36	Offshore of Hagi	1.9
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	7.0
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	36
Saga Pref.	41	Imari Bay	3.5
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	5.3
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	1.6
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(0.6)
Okinawa Pref.	47	Naha Port	110

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 34/47 (Missing value: 0)
Detection Frequency (sample): 34/47 (Missing value: 0)

Detection limit: 0.3 Quantification limit: 0.8

	stats
Geometric mean	tr(0.6)
Median	tr(0.5)
Maximum	14
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	2.4
Iwate Pref.	2	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(0.5)
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)	tr(0.5)
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	tr(0.4)
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(0.3)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	1.5
	12	Mouth of Riv. Sumida (Minato Ward)	2.9
Yokohama City	13	Yokohama Port	1.2
Kawasaki City	14	Keihin Canal, Port of Kawasaki	1.6
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	2.8
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	0.9
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.6)
Nagano Pref.	19	Lake Suwa (center)	tr(0.6)
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	1.0
Mie Pref.	22	Yokkaichi Port	tr(0.3)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	tr(0.3)
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1.6
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	1.3
Osaka City	27	Osaka Port	3.1
Hyogo Pref.	28	Offshore of Himeji	tr(0.4)
Kobe City	29	Kobe Port (center)	14
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1.5
Okayama Pref.	31	Offshore of Mizushima	tr(0.6)
Hiroshima Pref.	32	Kure Port	1.4
	33	Hiroshima Bay	tr(0.3)
Yamaguchi Pref.	34	Tokuyama Bay	nd
	35	Offshore of Ube	tr(0.3)
	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	1.1
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	3.0
Saga Pref.	41	Imari Bay	tr(0.5)
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(0.7)
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(0.4)
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	11

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 35/47 (Missing value: 0)
Detection Frequency (sample): 35/47 (Missing value: 0)

Detection limit : 0.6 Quantification limit : 1.5

	stats
Geometric mean	tr(1.3)
Median	tr(1.1)
Maximum	50
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	6.8
Iwate Pref.	2	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	tr(1.3)
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(1.1)
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	tr(0.6)
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(0.8)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	3.2
	12	Mouth of Riv. Sumida (Minato Ward)	7.3
Yokohama City	13	Yokohama Port	4.2
Kawasaki City	14	Keihin Canal, Port of Kawasaki	4.4
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	6.0
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	2.1
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.5
Nagano Pref.	19	Lake Suwa (center)	1.5
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	2.0
Mie Pref.	22	Yokkaichi Port	tr(0.7)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	tr(0.7)
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	3.2
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	2.9
Osaka City	27	Osaka Port	8.0
Hyogo Pref.	28	Offshore of Himeji	tr(1.1)
Kobe City	29	Kobe Port (center)	50
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	3.8
Okayama Pref.	31	Offshore of Mizushima	1.9
Hiroshima Pref.	32	Kure Port	4.9
	33	Hiroshima Bay	tr(0.8)
Yamaguchi Pref.	34	Tokuyama Bay	nd
_	35	Offshore of Ube	tr(0.8)
	36	Offshore of Hagi	tr(0.6)
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	2.3
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	11
Saga Pref.	41	Imari Bay	tr(1.3)
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	1.6
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(0.7)
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	35

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 1/47 (Missing value: 0)
Detection Frequency (sample): 1/47 (Missing value: 0)

Detection limit : 0.5 Quantification limit : 1.3

	stats
Geometric mean	nd
Median	nd
Maximum	tr(0.5)
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
, <u> </u>	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	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
ragosinia i ici.	46	Gotanda-bashi Bridge, Riv. Amori (Rhishinia City) Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	tr(0.5)

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 34/47 (Missing value: 0)
Detection Frequency (sample): 34/47 (Missing value: 0)

Detection limit: 0.3 Quantification limit: 0.8

	stats
Geometric mean	tr(0.6)
Median	tr(0.4)
Maximum	23
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	3.2
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(0.3)
Akita Pref.	4	Lake Hachiro	tr(0.4)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	tr(0.7)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(0.4)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.6)
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	tr(0.4)
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(0.4)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	3.2
,	12	Mouth of Riv. Sumida (Minato Ward)	3.3
Yokohama City	13	Yokohama Port	1.9
Kawasaki City	14	Keihin Canal, Port of Kawasaki	2.0
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	3.3
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	1.0
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	0.8
Nagano Pref.	19	Lake Suwa (center)	tr(0.7)
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	1.0
Mie Pref.	22	Yokkaichi Port	tr(0.4)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	0.9
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	1.4
Osaka City	27	Osaka Port	3.6
Hyogo Pref.	28	Offshore of Himeji	0.9
Kobe City	29	Kobe Port (center)	23
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	2.5
Okayama Pref.	31	Offshore of Mizushima	1.3
Hiroshima Pref.	32	Kure Port	2.2
	33	Hiroshima Bay	tr(0.3)
Yamaguchi Pref.	34	Tokuyama Bay	tr(0.3)
	35	Offshore of Ube	tr(0.6)
	36	Offshore of Hagi	tr(0.3)
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	tr(0.4)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	4.5
Saga Pref.	41	Imari Bay	tr(0.4)
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	17

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 8/47 (Missing value: 0)
Detection Frequency (sample): 8/47 (Missing value: 0)

Detection limit: 0.4 Quantification limit: 0.9

	stats
Geometric mean	nd
Median	nd
Maximum	2.6
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(0.8)
·	12	Mouth of Riv. Sumida (Minato Ward)	tr(0.5)
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	2.6
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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	tr(0.5)
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	1.4
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(0.8)
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	1.5
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	1.7

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 12/47 (Missing value: 0)
Detection Frequency (sample): 12/47 (Missing value: 0)

Detection limit: 0.3 Quantification limit: 0.7

	stats
Geometric mean	nd
Median	nd
Maximum	22
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	tr(0.3)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	tr(0.6)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	1.1
·	12	Mouth of Riv. Sumida (Minato Ward)	tr(0.5)
Yokohama City	13	Yokohama Port	0.8
Kawasaki City	14	Keihin Canal, Port of Kawasaki	0.9
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	1.1
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	tr(0.3)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(0.4)
Okayama Pref.	31	Offshore of Mizushima	tr(0.4)
Hiroshima Pref.	32	Kure Port	nd
	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)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	22
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	0.7

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 47/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 47/47\ (Missing\ value: 0)$

Detection limit : 0.6 Quantification limit : 1.5

	stats
Geometric mean	16
Median	11
Maximum	380
Minimum	4.0

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	22
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	12
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	11
Akita Pref.	4	Lake Hachiro	11
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	13
Fukushima Pref.	6	Onahama Port	160
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	100
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	13
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	48
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	8.9
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	190
-	12	Mouth of Riv. Sumida (Minato Ward)	27
Yokohama City	13	Yokohama Port	9.8
Kawasaki City	14	Keihin Canal, Port of Kawasaki	19
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	380
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	14
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	60
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	24
Nagano Pref.	19	Lake Suwa (center)	33
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	16
Aichi Pref.	21	Nagoya Port	11
Mie Pref.	22	Yokkaichi Port	9.0
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	6.0
Kvoto Pref.	24	Mivazu Port	4.0
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	19
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	14
Osaka City	27	Osaka Port	11
Hyogo Pref.	28	Offshore of Himeji	8.5
Kobe City	29	Kobe Port (center)	8.6
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	14
Okayama Pref.	31	Offshore of Mizushima	7.6
Hiroshima Pref.	32	Kure Port	7.2
	33	Hiroshima Bay	4.2
Yamaguchi Pref.	34	Tokuyama Bay	20
	35	Offshore of Ube	29
	36	Offshore of Hagi	9.0
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	9.5
Kagawa Pref.	38	Takamatsu Port	4.4
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	8.3
Kitakyushu City	40	Dokai Bay	210
Saga Pref.	41	Imari Bay	4.7
Nagasaki Pref.	42	Omura Bay	4.1
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	6.3
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	24
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	9.4
120500000000000000000000000000000000000	46	Gotanda-bashi Bridge, Riv. Amori (Kritshinia City)	9.7
Okinawa Pref.	47	Naha Port	5.5

(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.

[9] Toxaphenes /surface water (pg/L)

Monitored year :2018

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

Detection limit: *24 Quantification limit: *50

	stats
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	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
-	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Mivazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
3	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	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
1248001111111111111111111111111111111111	46	Gotanda-bashi Bridge, Riv. Amon (Krishinia City) Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	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 2) Data treated as detected means detection limit value and more.

(Note 3) nd: Not detected

(Note 4) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[9-1] 2-endo,3-exo,5-endo,6-exo,8,8,10,10-octachlorobornane (Parlar-26) /surface water (pg/L)

Monitored year :2018

Detection Frequency (site): 7/47 (Missing value: 0)
Detection Frequency (sample): 7/47 (Missing value: 0)

Detection limit : 2 Quantification limit : 4

	stats
Geometric mean	nd
Median	nd
Maximum	5
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(2)
,	12	Mouth of Riv. Sumida (Minato Ward)	tr(2)
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(2)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Mivazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(3)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	tr(2)
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(2)
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	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
5	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	5

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

[9-2] 2-endo,3-exo,5-endo,6-exo,8,8,9,10,10-nonachlorobornane (Parlar-50) /surface water (pg/L)

Monitored year :2018

Detection Frequency (site): 1/47 (Missing value: 0) Detection Frequency (sample): 1/47 (Missing value: 0)

Detection limit : 2 Quantification limit : 6

	stats
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	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	tr(2)
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	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

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

[9-3] 2,2,5,5,8,9,9,10,10-Nonachlorobornane (Parlar-62) /surface water (pg/L)

Monitored year :2018

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

Detection limit : 20 Quantification limit : 40

	stats
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	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	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

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

[10] Mirex/surface water (pg/L)

Monitored year :2018

Detection Frequency (site): 3/47 (Missing value: 0)
Detection Frequency (sample): 3/47 (Missing value: 0)

Detection limit : 0.3 Quantification limit : 0.7

	stats
Geometric mean	nd
Median	nd
Maximum	1.0
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
	12	Mouth of Riv. Sumida (Minato Ward)	tr(0.4)
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	1.0
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	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	tr(0.6)

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 45/47 (Missing value: 0)
Detection Frequency (sample): 45/47 (Missing value: 0)

Detection limit: *19 Quantification limit: *53

	stats
Geometric mean	130
Median	120
Maximum	3,200
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	100
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	tr(39)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(40)
Akita Pref.	4	Lake Hachiro	tr(31)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(29)
Fukushima Pref.	6	Onahama Port	290
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	620
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	99
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	510
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	110
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	1,100
_	12	Mouth of Riv. Sumida (Minato Ward)	880
Yokohama City	13	Yokohama Port	110
Kawasaki City	14	Keihin Canal, Port of Kawasaki	71
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	550
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	130
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	310
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	160
Nagano Pref.	19	Lake Suwa (center)	57
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	tr(39)
Aichi Pref.	21	Nagoya Port	3,200
Mie Pref.	22	Yokkaichi Port	160
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	tr(27)
Kvoto Pref.	24	Mivazu Port	110
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	660
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	330
Osaka City	27	Osaka Port	460
Hyogo Pref.	28	Offshore of Himeji	120
Kobe City	29	Kobe Port (center)	130
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,500
Okayama Pref.	31	Offshore of Mizushima	tr(50)
Hiroshima Pref.	32	Kure Port	nd
_	33	Hiroshima Bay	62
Yamaguchi Pref.	34	Tokuyama Bay	1,400
	35	Offshore of Ube	200
	36	Offshore of Hagi	90
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	tr(23)
Kagawa Pref.	38	Takamatsu Port	500
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	300
Saga Pref.	41	Imari Bay	tr(24)
Nagasaki Pref.	42	Omura Bay	tr(22)
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	270
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	180
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(52)
-	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(44)
Okinawa Pref.	47	Naha Port	270

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 22/47 (Missing value: 0)
Detection Frequency (sample): 22/47 (Missing value: 0)

Detection limit : 5 Quantification limit : 13

	stats
Geometric mean	nd
Median	nd
Maximum	72
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(5)
Iwate Pref.	2	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)	tr(5)
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(5)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(12)
	12	Mouth of Riv. Sumida (Minato Ward)	16
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	16
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(8)
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(6)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(6)
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	tr(7)
Aichi Pref.	21	Nagoya Port	72
Mie Pref.	22	Yokkaichi Port	tr(5)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(6)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	tr(7)
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(5)
Okayama Pref.	31	Offshore of Mizushima	tr(5)
Hiroshima Pref.	32	Kure Port	nd
	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)	tr(7)
Kagawa Pref.	38	Takamatsu Port	22
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)	13
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(5)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(5)
Ĭ	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	tr(5)

(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.

⁽Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

⁽Note 5) *: indicates the sum value of the Quantification [Detection] limits of each congener.

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 21/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 21/47\ (Missing\ value: 0)$

Detection limit : 5 Quantification limit : 13

	stats
Geometric mean	nd
Median	nd
Maximum	21
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(5)
Iwate Pref.	2	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)	tr(5)
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(5)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(9)
	12	Mouth of Riv. Sumida (Minato Ward)	tr(12)
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	14
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(7)
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(6)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(5)
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	tr(6)
Aichi Pref.	21	Nagoya Port	tr(12)
Mie Pref.	22	Yokkaichi Port	tr(5)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(5)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	tr(5)
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(5)
Okayama Pref.	31	Offshore of Mizushima	tr(5)
Hiroshima Pref.	32	Kure Port	nd
	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)	tr(7)
Kagawa Pref.	38	Takamatsu Port	21
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)	tr(12)
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(5)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(5)
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	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 2) Data treated as detected means detection limit value and more.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 13/47 (Missing value: 0)
Detection Frequency (sample): 13/47 (Missing value: 0)

Detection limit : 3 Quantification limit : 9

	stats
Geometric mean	nd
Median	nd
Maximum	110
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(6)
	12	Mouth of Riv. Sumida (Minato Ward)	tr(8)
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	9
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(3)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(3)
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	110
Mie Pref.	22	Yokkaichi Port	tr(4)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(4)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	tr(4)
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(3)
Okayama Pref.	31	Offshore of Mizushima	tr(3)
Hiroshima Pref.	32	Kure Port	nd
	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)	nd
Kagawa Pref.	38	Takamatsu Port	tr(7)
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)	tr(3)
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

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 23/47 (Missing value: 0)
Detection Frequency (sample): 23/47 (Missing value: 0)

Detection limit : 2 Quantification limit : 6

	stats
Geometric mean	nd
Median	nd
Maximum	11
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(2)
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(5)
	12	Mouth of Riv. Sumida (Minato Ward)	7
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	tr(5)
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(2)
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(2)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(2)
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	11
Mie Pref.	22	Yokkaichi Port	tr(3)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(3)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	tr(4)
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	nd
Kobe City	29	Kobe Port (center)	tr(2)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(3)
Okayama Pref.	31	Offshore of Mizushima	tr(2)
Hiroshima Pref.	32	Kure Port	tr(2)
	33	Hiroshima Bay	tr(2)
Yamaguchi Pref.	34	Tokuyama Bay	tr(2)
	35	Offshore of Ube	tr(2)
	36	Offshore of Hagi	tr(2)
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	tr(4)
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)	tr(2)
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)	tr(2)
Okinawa Pref.	47	Naha Port	tr(2)

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 15/47 (Missing value: 0)
Detection Frequency (sample): 15/47 (Missing value: 0)

Detection limit : 1 Quantification limit : 3

	stats
Geometric mean	nd
Median	nd
Maximum	54
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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	tr(1)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(1)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	4
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(1)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(2)
, <u> </u>	12	Mouth of Riv. Sumida (Minato Ward)	4
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	tr(2)
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(1)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(1)
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	54
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	11
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	tr(1)
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	tr(2)
5	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	nd
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(1)
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
115001111111111111111111111111111111	46	Gotanda-bashi Bridge, Riv. Athori (Khishinia City)	nd
Okinawa Pref.	47	Naha Port	tr(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 7/47 (Missing value: 0)
Detection Frequency (sample): 7/47 (Missing value: 0)

Detection limit : 1 Quantification limit : 2

	stats
Geometric mean	nd
Median	nd
Maximum	11
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	tr(1)
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(1)
·	12	Mouth of Riv. Sumida (Minato Ward)	tr(1)
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	tr(1)
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	8
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kvoto Pref.	24	Mivazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	11
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	tr(1)
Hiroshima Pref.	32	Kure Port	nd
-	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
Tunnagueni TTen	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	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
Kagosiiiila Fiel.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	46	Naha Port	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 2) Data treated as detected means detection limit value and more.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

(Note 4) nd: Not detected

(Note 5) *: indicates the sum value of the Quantification [Detection] limits of each congener.

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

Monitored year :2018

Detection Frequency (site): 6/47 (Missing value: 0)
Detection Frequency (sample): 6/47 (Missing value: 0)

Detection limit : 1 Quantification limit : 3

	stats
Geometric mean	nd
Median	nd
Maximum	20
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	tr(1)
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(1)
· -	12	Mouth of Riv. Sumida (Minato Ward)	tr(2)
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	tr(1)
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	20
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	tr(1)
3	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 Bav	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

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 3/47 (Missing value: 0)
Detection Frequency (sample): 3/47 (Missing value: 0)

Detection limit : 3 Quantification limit : 8

	stats
Geometric mean	nd
Median	nd
Maximum	65
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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(4)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	tr(6)
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
-	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	65
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	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

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 3/47 (Missing value: 0) Detection Frequency (sample): 3/47 (Missing value: 0)

Detection limit : 3 Quantification limit : 8

	stats
Geometric mean	nd
Median	nd
Maximum	28
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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(4)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	tr(6)
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
·	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	28
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	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

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 35/47 (Missing value: 0)
Detection Frequency (sample): 35/47 (Missing value: 0)

Detection limit : 1 Quantification limit : 3

	stats
Geometric mean	tr(2)
Median	tr(1)
Maximum	69
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(2)
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	tr(1)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	5
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	5
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	3
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	8
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(1)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	13
·	12	Mouth of Riv. Sumida (Minato Ward)	18
Yokohama City	13	Yokohama Port	tr(1)
Kawasaki City	14	Keihin Canal, Port of Kawasaki	tr(1)
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	8
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(1)
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	6
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(2)
Nagano Pref.	19	Lake Suwa (center)	tr(1)
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	69
Mie Pref.	22	Yokkaichi Port	tr(1)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	tr(2)
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	6
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	3
Osaka City	27	Osaka Port	3
Hyogo Pref.	28	Offshore of Himeji	tr(1)
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	3
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	5
	35	Offshore of Ube	tr(1)
	36	Offshore of Hagi	tr(2)
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	tr(1)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	3
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	tr(1)
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(2)
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(2)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(1)
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(1)
Okinawa Pref.	47	Naha Port	tr(2)

(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.

(Note 3) *: indicates the sum value of the Quantification [Detection] limits of each congener.

(Note 4) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 46/47 (Missing value: 0)
Detection Frequency (sample): 46/47 (Missing value: 0)

Detection limit : 2 Quantification limit : 6

	stats
Geometric mean	12
Median	12
Maximum	170
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	11
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	tr(3)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(4)
Akita Pref.	4	Lake Hachiro	tr(4)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(4)
Fukushima Pref.	6	Onahama Port	23
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	42
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	12
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	40
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	6
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	89
·	12	Mouth of Riv. Sumida (Minato Ward)	84
Yokohama City	13	Yokohama Port	10
Kawasaki City	14	Keihin Canal, Port of Kawasaki	6
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	37
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	11
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	26
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	13
Nagano Pref.	19	Lake Suwa (center)	6
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	tr(4)
Aichi Pref.	21	Nagoya Port	170
Mie Pref.	22	Yokkaichi Port	11
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	tr(2)
Kyoto Pref.	24	Miyazu Port	16
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	39
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	23
Osaka City	27	Osaka Port	31
Hyogo Pref.	28	Offshore of Himeji	13
Kobe City	29	Kobe Port (center)	8
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	94
Okayama Pref.	31	Offshore of Mizushima	tr(3)
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	8
Yamaguchi Pref.	34	Tokuyama Bay	95
	35	Offshore of Ube	12
	36	Offshore of Hagi	14
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	tr(2)
Kagawa Pref.	38	Takamatsu Port	32
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	tr(3)
Kitakyushu City	40	Dokai Bay	21
Saga Pref.	41	Imari Bay	tr(3)
Nagasaki Pref.	42	Omura Bay	tr(3)
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	20
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	17
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	6
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	7
Okinawa Pref.	47	Naha Port	25

(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.

(Note 3) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 47/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 47/47\ (Missing\ value: 0)$

Detection limit : 4 Quantification limit : 11

	stats
Geometric mean	120
Median	110
Maximum	2,700
Minimum	12

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	82
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	36
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	36
Akita Pref.	4	Lake Hachiro	26
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	25
Fukushima Pref.	6	Onahama Port	260
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	570
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	79
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	450
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	99
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	1,000
	12	Mouth of Riv. Sumida (Minato Ward)	750
Yokohama City	13	Yokohama Port	97
Kawasaki City	14	Keihin Canal, Port of Kawasaki	64
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	480
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	110
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	270
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	130
Nagano Pref.	19	Lake Suwa (center)	50
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	28
Aichi Pref.	21	Nagoya Port	2,700
Mie Pref.	22	Yokkaichi Port	140
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	25
Kyoto Pref.	24	Miyazu Port	94
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	600
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	280
Osaka City	27	Osaka Port	430
Hyogo Pref.	28	Offshore of Himeji	110
Kobe City	29	Kobe Port (center)	120
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,400
Okayama Pref.	31	Offshore of Mizushima	38
Hiroshima Pref.	32	Kure Port	12
	33	Hiroshima Bay	54
Yamaguchi Pref.	34	Tokuyama Bay	1,300
	35	Offshore of Ube	190
	36	Offshore of Hagi	74
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	14
Kagawa Pref.	38	Takamatsu Port	440
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	15
Kitakyushu City	40	Dokai Bay	280
Saga Pref.	41	Imari Bay	21
Nagasaki Pref.	42	Omura Bay	18
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	230
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	160
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	40
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	36
Okinawa Pref.	47	Naha Port	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.

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

Monitored year :2018

Detection Frequency (site): 42/47 (Missing value: 0)
Detection Frequency (sample): 42/47 (Missing value: 0)

Detection limit : 30 Quantification limit : 70

	stats
Geometric mean	310
Median	300
Maximum	4,100
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	180
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	70
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	210
Akita Pref.	4	Lake Hachiro	200
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	360
Fukushima Pref.	6	Onahama Port	150
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	870
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	1,300
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	1,100
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	1,400
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	1,900
-	12	Mouth of Riv. Sumida (Minato Ward)	4,100
Yokohama City	13	Yokohama Port	1,000
Kawasaki City	14	Keihin Canal, Port of Kawasaki	960
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	310
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	3,100
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	170
Nagano Pref.	19	Lake Suwa (center)	300
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	120
Aichi Pref.	21	Nagoya Port	650
Mie Pref.	22	Yokkaichi Port	480
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	450
Kyoto Pref.	24	Mivazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	3,800
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	2,300
Osaka City	27	Osaka Port	1,900
Hyogo Pref.	28	Offshore of Himeji	120
Kobe City	29	Kobe Port (center)	240
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	290
Okayama Pref.	31	Offshore of Mizushima	170
Hiroshima Pref.	32	Kure Port	670
	33	Hiroshima Bay	250
Yamaguchi Pref.	34	Tokuyama Bay	210
Tuning wom Tron	35	Offshore of Ube	120
	36	Offshore of Hagi	nd
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	150
Kagawa Pref.	38	Takamatsu Port	550
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	530
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	260
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	680
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	230
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	100
ragosinila i ici.	46	Gotanda-bashi Bridge, Riv. Amori (Rhishinia City) Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	420
Okinawa Pref.	47	Naha Port	920

(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)/surface water (pg/L)

Monitored year :2018

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

Detection limit : 30 Quantification limit : 70

	stats
Geometric mean	1,100
Median	1,100
Maximum	28,000
Minimum	160

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	480
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	220
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	310
Akita Pref.	4	Lake Hachiro	1,800
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	520
Fukushima Pref.	6	Onahama Port	1,100
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2,900
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	1,600
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	2,100
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	1,700
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	2,600
_	12	Mouth of Riv. Sumida (Minato Ward)	3,300
Yokohama City	13	Yokohama Port	1,200
Kawasaki City	14	Keihin Canal, Port of Kawasaki	1,900
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	1,200
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	260
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	28,000
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	3,100
Nagano Pref.	19	Lake Suwa (center)	550
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	280
Aichi Pref.	21	Nagoya Port	1,100
Mie Pref.	22	Yokkaichi Port	2,200
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	3,000
Kyoto Pref.	24	Miyazu Port	620
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	19,000
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	10,000
Osaka City	27	Osaka Port	10,000
Hyogo Pref.	28	Offshore of Himeji	740
Kobe City	29	Kobe Port (center)	830
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,800
Okayama Pref.	31	Offshore of Mizushima	580
Hiroshima Pref.	32	Kure Port	600
	33	Hiroshima Bay	450
Yamaguchi Pref.	34	Tokuyama Bay	350
	35	Offshore of Ube	360
	36	Offshore of Hagi	440
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	600
Kagawa Pref.	38	Takamatsu Port	1,400
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	160
Kitakyushu City	40	Dokai Bay	3,700
Saga Pref.	41	Imari Bay	570
Nagasaki Pref.	42	Omura Bay	3,100
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	1,400
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	850
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	310
Ĭ	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	560
Okinawa Pref.	47	Naha Port	420

(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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 47/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 47/47\ (Missing\ value: 0)$

Detection limit : 0.5 Quantification limit : 1.3

	stats
Geometric mean	12
Median	9.7
Maximum	320
Minimum	2.7

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	15
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	7.2
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	6.5
Akita Pref.	4	Lake Hachiro	8.8
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	3.6
Fukushima Pref.	6	Onahama Port	50
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	100
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	12
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	61
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	12
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	320
·	12	Mouth of Riv. Sumida (Minato Ward)	65
Yokohama City	13	Yokohama Port	12
Kawasaki City	14	Keihin Canal, Port of Kawasaki	20
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	280
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	8.3
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	18
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	20
Nagano Pref.	19	Lake Suwa (center)	31
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	9.0
Aichi Pref.	21	Nagoya Port	23
Mie Pref.	22	Yokkaichi Port	6.7
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	3.3
Kyoto Pref.	24	Miyazu Port	2.7
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	52
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	14
Osaka City	27	Osaka Port	12
Hyogo Pref.	28	Offshore of Himeji	6.3
Kobe City	29	Kobe Port (center)	13
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	11
Okayama Pref.	31	Offshore of Mizushima	5.2
Hiroshima Pref.	32	Kure Port	4.9
	33	Hiroshima Bay	3.9
Yamaguchi Pref.	34	Tokuyama Bay	15
	35	Offshore of Ube	7.7
-	36	Offshore of Hagi	5.6
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	9.7
Kagawa Pref.	38	Takamatsu Port	3.3
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	3.4
Kitakyushu City	40	Dokai Bay	59
Saga Pref.	41	Imari Bay	3.7
Nagasaki Pref.	42	Omura Bay	3.1
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	8.6
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	6.0
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	3.7
Kagosiiiiia i ici.	46	Gotanda-bashi Bridge, Riv. Amori (Ririshinia City) Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	4.4
	40	Gotanua-vasin Bridge, Kiv. Gotanua (Ichikikushikino City)	7.7

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

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.

⁽Note 3) $\mbox{tr}:$ detection limit value and more, less than Quantification limit value.

[18] Endosulfans /surface water (pg/L)

Monitored year :2018

 $\label{eq:Detection} Detection\ Frequency\ (site): 1/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 1/47\ (Missing\ value: 0)$

Detection limit: *50 Quantification limit: *150

	stats
Geometric mean	nd
Median	nd
Maximum	tr(60)
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
·	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	tr(60)
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	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
ragosimia i ici.	46	Gotanda-bashi Bridge, Riv. Amori (Kritshinia City)	nd
Okinawa Pref.	47	Naha Port	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 2) Data treated as detected means detection limit value and more.

⁽Note 3) $\mbox{tr}:\mbox{detection limit value}$ and more, less than Quantification limit value.

[18-1] α-Endosulfan/surface water (pg/L)

Monitored year :2018

 $\label{eq:Detection} Detection\ Frequency\ (site): 1/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 1/47\ (Missing\ value: 0)$

Detection limit : 40 Quantification limit : 120

	stats
Geometric mean	nd
Median	nd
Maximum	tr(50)
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
_	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	tr(50)
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	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

(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.

⁽Note 3) $\mbox{tr}:\mbox{detection limit value}$ and more, less than Quantification limit value.

[18-2] β- Endosulfan/surface water (pg/L)

Monitored year :2018

 $Detection\ Frequency\ (site): 3/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 3/47\ (Missing\ value: 0)$

Detection limit : 10 Quantification limit : 30

	stats
Geometric mean	nd
Median	nd
Maximum	tr(20)
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(10)
Iwate Pref.	2	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	tr(20)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
_	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	tr(10)
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
rumagaem rren.	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
Kagawa Fici. 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)	
Kagosiiina Prei.	45		nd
Okinawa Pref.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Prei.	4/	Naha Port	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 3) $\mbox{tr}:\mbox{detection limit value}$ and more, less than Quantification limit value.

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

[20] Total Polychlorinated Naphthalenes/surface water (pg/L)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 39/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 39/47\ (Missing\ value: 0)$

Detection limit: *12 Quantification limit: *35

	stats
Geometric mean	tr(32)
Median	tr(34)
Maximum	260
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(24)
Iwate Pref.	2	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	64
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(33)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	62
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	35
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	36
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	100
·	12	Mouth of Riv. Sumida (Minato Ward)	150
Yokohama City	13	Yokohama Port	160
Kawasaki City	14	Keihin Canal, Port of Kawasaki	110
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	240
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(15)
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	63
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(25)
Nagano Pref.	19	Lake Suwa (center)	tr(24)
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	tr(22)
Aichi Pref.	21	Nagoya Port	49
Mie Pref.	22	Yokkaichi Port	tr(12)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	tr(30)
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	120
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	72
Osaka City	27	Osaka Port	64
Hyogo Pref.	28	Offshore of Himeji	tr(14)
Kobe City	29	Kobe Port (center)	47
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	45
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	tr(34)
	33	Hiroshima Bay	tr(21)
Yamaguchi Pref.	34	Tokuyama Bay	260
	35	Offshore of Ube	37
	36	Offshore of Hagi	62
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	tr(18)
Kagawa Pref.	38	Takamatsu Port	tr(20)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	96
Saga Pref.	41	Imari Bay	tr(32)
Nagasaki Pref.	42	Omura Bay	tr(34)
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	57
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(12)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(15)
Okinawa Pref.	47	Naha Port	130

(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.

(Note 3) $\mbox{tr}:\mbox{detection limit value}$ and more, less than Quantification limit value.

[20-1] Monochloronaphthalenes/surface water (pg/L)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 14/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 14/47\ (Missing\ value: 0)$

Detection limit : 5 Quantification limit : 15

	stats
Geometric mean	nd
Median	nd
Maximum	220
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(5)
Iwate Pref.	2	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	19
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(5)
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
·	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	tr(10)
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	tr(14)
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)	tr(6)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	tr(5)
-	33	Hiroshima Bay	tr(6)
Yamaguchi Pref.	34	Tokuyama Bay	220
	35	Offshore of Ube	tr(8)
-	36	Offshore of Hagi	50
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	nd
Saga Pref.	41	Imari Bay	22
Nagasaki Pref.	42	Omura Bay	24
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
ragosimia i ici.	46	Gotanda-bashi Bridge, Riv. Amori (Ririshinia City) Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	15

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

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.

⁽Note 3) $\mbox{tr}:\mbox{detection limit value}$ and more, less than Quantification limit value.

[20-2] Dichloronaphthalenes/surface water (pg/L)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 39/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 39/47\ (Missing\ value: 0)$

Detection limit : 4 Quantification limit : 12

	stats
Geometric mean	tr(7)
Median	tr(7)
Maximum	33
Minimum	nd

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

(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.

⁽Note 3) $\mbox{tr}:\mbox{detection limit value}$ and more, less than Quantification limit value.

[20-3] Trichloronaphthalenes/surface water (pg/L)

Monitored year :2018

 $\label{eq:definition} Detection\ Frequency\ (site): 46/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 46/47\ (Missing\ value: 0)$

Detection limit : 0.6 Quantification limit : 1.5

	stats
Geometric mean	4.2
Median	4.0
Maximum	49
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	3.2
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	tr(1.4)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	2.2
Akita Pref.	4	Lake Hachiro	2.1
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	2.0
Fukushima Pref.	6	Onahama Port	7.8
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	4.0
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	15
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	4.4
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	3.1
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	17
_	12	Mouth of Riv. Sumida (Minato Ward)	49
Yokohama City	13	Yokohama Port	37
Kawasaki City	14	Keihin Canal, Port of Kawasaki	35
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	33
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	2.5
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	11
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	3.9
Nagano Pref.	19	Lake Suwa (center)	5.0
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	4.2
Aichi Pref.	21	Nagoya Port	8.3
Mie Pref.	22	Yokkaichi Port	tr(1.4)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	tr(1.1)
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	22
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	9.9
Osaka City	27	Osaka Port	13
Hyogo Pref.	28	Offshore of Himeji	1.8
Kobe City	29	Kobe Port (center)	9.2
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	5.1
Okayama Pref.	31	Offshore of Mizushima	tr(1.3)
Hiroshima Pref.	32	Kure Port	5.7
	33	Hiroshima Bay	2.4
Yamaguchi Pref.	34	Tokuyama Bay	6.4
	35	Offshore of Ube	8.4
	36	Offshore of Hagi	tr(1.1)
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	1.6
Kagawa Pref.	38	Takamatsu Port	3.1
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	tr(0.9)
Kitakyushu City	40	Dokai Bay	12
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)	6.7
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	2.0
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(1.4)
Tangoommia 1101.	46	Gotanda-bashi Bridge, Riv. Antori (Kirishinia City)	tr(1.0)
Okinawa Pref.	47	Naha Port	10

(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 3) $\mbox{tr}:\mbox{detection limit value}$ and more, less than Quantification limit value.

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

[20-4] Tetrachloronaphthalenes/surface water (pg/L)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 47/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 47/47\ (Missing\ value: 0)$

Detection limit : 0.4 Quantification limit : 1.0

	stats
Geometric mean	11
Median	10
Maximum	120
Minimum	1.3

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	7.6
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	5.0
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	2.5
Akita Pref.	4	Lake Hachiro	4.9
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	5.4
Fukushima Pref.	6	Onahama Port	18
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	15
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	27
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	17
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	19
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	49
	12	Mouth of Riv. Sumida (Minato Ward)	64
Yokohama City	13	Yokohama Port	64
Kawasaki City	14	Keihin Canal, Port of Kawasaki	43
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	120
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	5.8
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	35
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	10
Nagano Pref.	19	Lake Suwa (center)	11
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	10
Aichi Pref.	21	Nagoya Port	19
Mie Pref.	22	Yokkaichi Port	4.7
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	4.4
Kyoto Pref.	24	Miyazu Port	2.2
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	69
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	36
Osaka City	27	Osaka Port	38
Hyogo Pref.	28	Offshore of Himeji	3.7
Kobe City	29	Kobe Port (center)	16
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	18
Okayama Pref.	31	Offshore of Mizushima	3.6
Hiroshima Pref.	32	Kure Port	10
	33	Hiroshima Bay	2.9
Yamaguchi Pref.	34	Tokuyama Bay	7.5
	35	Offshore of Ube	13
-	36	Offshore of Hagi	1.7
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	7.0
Kagawa Pref.	38	Takamatsu Port	9.6
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	2.9
Kitakyushu City	40	Dokai Bay	36
Saga Pref.	41	Imari Bay	2.5
Nagasaki Pref.	42	Omura Bay	1.3
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	31
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	7.8
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	6.5
Kagosiiiiia i ici.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	11
	40	Communa-vasin Bridge, IV. Colanda (Ichikikushikino City)	11

(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.

[20-5] Pentachloronaphthalenes/surface water (pg/L)

Monitored year :2018

 $Detection\ Frequency\ (site): 45/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 45/47\ (Missing\ value: 0)$

Detection limit : 0.5 Quantification limit : 1.3

	stats
Geometric mean	3.2
Median	2.7
Maximum	73
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	2.6
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	2.1
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(0.6)
Akita Pref.	4	Lake Hachiro	tr(1.2)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	1.5
Fukushima Pref.	6	Onahama Port	6.2
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	5.5
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	7.5
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	5.9
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	5.5
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	19
,	12	Mouth of Riv. Sumida (Minato Ward)	13
Yokohama City	13	Yokohama Port	14
Kawasaki City	14	Keihin Canal, Port of Kawasaki	11
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	73
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.8)
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	8.5
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	3.7
Nagano Pref.	19	Lake Suwa (center)	3.1
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	2.8
Aichi Pref.	21	Nagoya Port	6.1
Mie Pref.	22	Yokkaichi Port	1.4
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	tr(1.1)
Kyoto Pref.	24	Miyazu Port	tr(0.6)
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	19
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	9.9
Osaka City	27	Osaka Port	7.8
Hyogo Pref.	28	Offshore of Himeji	1.7
Kobe City	29	Kobe Port (center)	6.4
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	11
Okayama Pref.	31	Offshore of Mizushima	tr(1.2)
Hiroshima Pref.	32	Kure Port	2.0
THOSHINA TICI.	33	Hiroshima Bay	tr(1.1)
Yamaguchi Pref.	34	Tokuyama Bay	nd
ramaguem r rei.	35	Offshore of Ube	tr(1.2)
	36	Offshore of Hagi	tr(0.5)
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	2.3
Kagawa Pref.	38	Takamatsu Port	2.3
Kagawa Fiei. Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	tr(0.9)
Kitakyushu City	40	Dokai Bay	24
Saga Pref.	41	Imari Bay	tr(1.1)
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd 11
	43		2.6
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	2.0
O1: P. C	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	2.6
Okinawa Pref.	47	Naha Port	15

(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.

⁽Note 3) $\mbox{tr}:\mbox{detection limit value}$ and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

⁽Note 5) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[20-6] Hexachloronaphthalenes/surface water (pg/L)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 23/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 23/47\ (Missing\ value: 0)$

Detection limit : 0.4 Quantification limit : 0.9

	stats
Geometric mean	tr(0.5)
Median	nd
Maximum	11
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.5)
Iwate Pref.	2	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	tr(0.8)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.5
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	tr(0.8)
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	4.8
-	12	Mouth of Riv. Sumida (Minato Ward)	1.7
Yokohama City	13	Yokohama Port	2.4
Kawasaki City	14	Keihin Canal, Port of Kawasaki	3.3
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	9.2
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(0.8)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.6)
Nagano Pref.	19	Lake Suwa (center)	tr(0.4)
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	tr(0.5)
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1.4
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	tr(0.6)
Hyogo Pref.	28	Offshore of Himeji	tr(0.4)
Kobe City	29	Kobe Port (center)	1.1
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	3.8
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
g	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	tr(0.4)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	11
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	1.0
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(0.5)
Kagosiiiiia i ici.	46	Gotanda-bashi Bridge, Riv. Amori (Ririshinia City) Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
	70	Gounda-basin Bridge, Kiv. Gotanda (fonkikushikili) City)	iiu

(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.

(Note 3) $\mbox{tr}:\mbox{detection limit value}$ and more, less than Quantification limit value.

[20-7] Heptachloronaphthalenes/surface water (pg/L)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 6/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 6/47\ (Missing\ value: 0)$

Detection limit : 0.8 Quantification limit : 2.0

	stats
Geometric mean	nd
Median	nd
Maximum	3.2
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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(1.0)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(1.0)
	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	tr(0.8)
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	tr(0.9)
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(0.8)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	nd
Kagawa Pref.	38	Takamatsu Port	nd
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	3.2
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	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 2) Data treated as detected means detection limit value and more.

(Note 3) $\mbox{tr}:\mbox{detection limit value}$ and more, less than Quantification limit value.

[20-8] Octachloronaphthalenes/surface water (pg/L)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 4/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 4/47\ (Missing\ value: 0)$

Detection limit : 0.3 Quantification limit : 0.9

	stats
Geometric mean	nd
Median	nd
Maximum	tr(0.4)
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(0.3)
, <u> </u>	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	tr(0.3)
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	tr(0.3)
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	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)	nd
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	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	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

(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.

⁽Note 3) *: indicates the sum value of the Quantification [Detection] limits of each congener.

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd: Not detected

[22] Pentachlorophenol and its salts and esters/surface water (pg/L)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 35/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 35/47\ (Missing\ value: 0)$

Detection limit: *15 Quantification limit: *40

	stats
Geometric mean	55
Median	57
Maximum	4,600
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	400
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	tr(18)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	48
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	88
Fukushima Pref.	6	Onahama Port	140
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	130
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	4,600
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	87
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	250
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	510
, i	12	Mouth of Riv. Sumida (Minato Ward)	200
Yokohama City	13	Yokohama Port	41
Kawasaki City	14	Keihin Canal, Port of Kawasaki	400
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	420
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	160
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	1,300
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(23)
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	tr(31)
Aichi Pref.	21	Nagoya Port	260
Mie Pref.	22	Yokkaichi Port	160
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	tr(20)
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	350
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	310
Osaka City	27	Osaka Port	130
Hyogo Pref.	28	Offshore of Himeji	57
Kobe City	29	Kobe Port (center)	tr(24)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	78
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	68
g	35	Offshore of Ube	nd
	36	Offshore of Hagi	tr(27)
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	61
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	65
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(39)
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(22)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
124gosiiiii 1 101.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(28)
Okinawa Pref.	47	Naha Port	110
OKHIGHA I ICI.		- 100AW - 041	110

(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.

(Note 3) $\mbox{tr}:\mbox{detection limit value}$ and more, less than Quantification limit value.

[22-1] Pentachlorophenol/surface water (pg/L)

Monitored year :2018

 $Detection\ Frequency\ (site): 44/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 44/47\ (Missing\ value: 0)$

Detection limit: 9 Quantification limit: 24

	stats
Geometric mean	50
Median	47
Maximum	4,400
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	370
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	tr(18)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(9)
Akita Pref.	4	Lake Hachiro	41
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	79
Fukushima Pref.	6	Onahama Port	130
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	83
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	4,400
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	60
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	220
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	410
Ĭ.	12	Mouth of Riv. Sumida (Minato Ward)	160
Yokohama City	13	Yokohama Port	32
Kawasaki City	14	Keihin Canal, Port of Kawasaki	350
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	290
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	140
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	1,200
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(23)
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	24
Aichi Pref.	21	Nagoya Port	160
Mie Pref.	22	Yokkaichi Port	150
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	tr(13)
Kyoto Pref.	24	Miyazu Port	tr(12)
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	240
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	290
Osaka City	27	Osaka Port	96
Hyogo Pref.	28	Offshore of Himeji	47
Kobe City	29	Kobe Port (center)	24
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	72
Okayama Pref.	31	Offshore of Mizushima	tr(11)
Hiroshima Pref.	32	Kure Port	tr(11)
THOSHINA TICI.	33	Hiroshima Bay	tr(13)
Yamaguchi Pref.	34	Tokuyama Bay	58
ramaguem r rei.	35	Offshore of Ube	tr(11)
	36	Offshore of Hagi	27
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	tr(11)
Kagawa Pref.	38	Takamatsu Port	54
Kagawa Fiel. Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	tr(12)
Kitakyushu City	40	Dokai Bay	57
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Nagasaki Prei. Kumamoto Pref.	42	Omura Bay Hiraki-bashi Bridge, Riv. Midori (Uto City)	29
	43		
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	tr(15)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(10)
O1: D C	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	28
Okinawa Pref.	47	Naha Port	100

(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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[22-2] Pentachloroanisole/surface water (pg/L)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 30/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 30/47\ (Missing\ value: 0)$

Detection limit : 6 Quantification limit : 16

	stats
Geometric mean	tr(10)
Median	tr(7)
Maximum	230
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	35
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	tr(7)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(9)
Fukushima Pref.	6	Onahama Port	tr(6)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	49
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	230
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	27
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	26
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	100
·	12	Mouth of Riv. Sumida (Minato Ward)	40
Yokohama City	13	Yokohama Port	tr(9)
Kawasaki City	14	Keihin Canal, Port of Kawasaki	48
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	130
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	19
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	140
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	tr(7)
Aichi Pref.	21	Nagoya Port	97
Mie Pref.	22	Yokkaichi Port	tr(12)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	tr(8)
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	110
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	17
Osaka City	27	Osaka Port	33
Hyogo Pref.	28	Offshore of Himeji	tr(10)
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(6)
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	tr(10)
	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	tr(7)
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	tr(8)
Saga Pref.	41	Imari Bay	nd
Nagasaki Pref.	42	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(10)
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	tr(7)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
124800111114 1 101.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	47	Naha Port	tr(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 3) $\mbox{tr}:$ detection limit value and more, less than Quantification limit value.

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

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

Monitored year :2018

 $\label{eq:DetectionFrequency} Detection\ Frequency\ (site): 13/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 13/47\ (Missing\ value: 0)$

Detection limit : *4,000 Quantification limit : *10,000

	stats
Geometric mean	nd
Median	nd
Maximum	13,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	tr(6,000)
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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	tr(4,000)
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(5,000)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(4,000)
	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	tr(4,000)
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	tr(4,000)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	tr(4,000)
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	13,000
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	tr(6,000)
Osaka City	27	Osaka Port	tr(9,000)
Hyogo Pref.	28	Offshore of Himeji	tr(9,000)
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(7,000)
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	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)	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)	11,000
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

⁽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.

⁽Note 3) $\mbox{tr}:$ detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 8/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 8/47\ (Missing\ value: 0)$

Detection limit : 400 Quantification limit : 1,000

	stats
Geometric mean	nd
Median	nd
Maximum	1,600
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(900)
Akita Pref.	4	Lake Hachiro	1,600
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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(500)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
ĺ	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(400)
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	tr(400)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(400)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	tr(500)
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.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
Tumagacin TTCI.	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
Kagawa Fici. 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)	1,500
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	,
Kagosiiina Prei.	45		nd
Okinawa Pref.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okiliawa Prei.	4/	Naha Port	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 2) Data treated as detected means detection limit value and more.

(Note 3) $\mbox{tr}:$ detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 6/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 6/47\ (Missing\ value: 0)$

Detection limit : 800 Quantification limit : 2,000

	stats
Geometric mean	nd
Median	nd
Maximum	3,500
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	tr(1,200)
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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	nd
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(900)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	nd
	12	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	tr(800)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(800)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	tr(900)
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.	32	Kure Port	nd
	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)	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)	3,500
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

(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.

⁽Note 3) $\mbox{tr}:$ detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:DetectionFrequency} Detection\ Frequency\ (site): 16/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 16/47\ (Missing\ value: 0)$

Detection limit : 1,000 Quantification limit : 3,000

	stats
Geometric mean	nd
Median	nd
Maximum	3,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	tr(1,000)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(2,000)
Akita Pref.	4	Lake Hachiro	3,000
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	tr(1,000)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(1,000)
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	tr(2,000)
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(2,000)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(1,000)
	12	Mouth of Riv. Sumida (Minato Ward)	tr(1,000)
Yokohama City	13	Yokohama Port	tr(1,000)
Kawasaki City	14	Keihin Canal, Port of Kawasaki	tr(2,000)
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	nd
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	24	Miyazu Port	nd
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(1,000)
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	27	Osaka Port	nd
Hyogo Pref.	28	Offshore of Himeji	tr(1,000)
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(1,000)
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
	35	Offshore of Ube	nd
	36	Offshore of Hagi	tr(1,000)
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	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)	tr(2,000)
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

(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.

⁽Note 3) $\mbox{tr}:\mbox{detection limit value}$ and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:potential} Detection\ Frequency\ (site): 18/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 18/47\ (Missing\ value: 0)$

Detection limit : 1,500 Quantification limit : 4,500

	stats
Geometric mean	nd
Median	nd
Maximum	11,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	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
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	tr(1,600)
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	tr(1,800)
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	tr(2,600)
· -	12	Mouth of Riv. Sumida (Minato Ward)	tr(1,900)
Yokohama City	13	Yokohama Port	nd
Kawasaki City	14	Keihin Canal, Port of Kawasaki	tr(1,900)
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	19	Lake Suwa (center)	nd
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	21	Nagoya Port	nd
Mie Pref.	22	Yokkaichi Port	tr(2,900)
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	tr(3,900)
Kyoto Pref.	24	Miyazu Port	tr(2,300)
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	11.000
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	6,400
Osaka City	27	Osaka Port	9,100
Hyogo Pref.	28	Offshore of Himeji	7,000
Kobe City	29	Kobe Port (center)	nd
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	5,800
Okayama Pref.	31	Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
	33	Hiroshima Bay	nd
Yamaguchi Pref.	34	Tokuyama Bay	nd
Tumagacin Trei.	35	Offshore of Ube	nd
-	36	Offshore of Hagi	tr(2,400)
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	38	Takamatsu Port	tr(2,500)
Kagawa Fici. 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)	tr(3,600)
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Kagosiiina Prei.	45		
Okinawa Pref.	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(1,500)
Okiliawa Prel.	4/	Naha Port	tr(1,500)

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

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.

⁽Note 3) $\mbox{tr}:$ detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:definition} Detection\ Frequency\ (site): 44/47\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 44/47\ (Missing\ value: 0)$

Detection limit : 50 Quantification limit : 120

	stats
Geometric mean	190
Median	130
Maximum	2,600
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	130
Iwate Pref.	2	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	tr(50)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	170
Fukushima Pref.	6	Onahama Port	130
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	920
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	870
Saitama Pref.	9	Akigaseshusuizeki of Riv. Arakawa (Shiki City)	670
Chiba City	10	Mouth of Riv. Hanami (Chiba City)	330
Tokyo Met.	11	Mouth of Riv. Arakawa (Koto Ward)	710
	12	Mouth of Riv. Sumida (Minato Ward)	1,800
Yokohama City	13	Yokohama Port	330
Kawasaki City	14	Keihin Canal, Port of Kawasaki	370
Niigata Pref.	15	Lower Riv. Shinano (Niigata City)	tr(80)
Toyama Pref.	16	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(70)
Ishikawa Pref.	17	Mouth of Riv. Sai (Kanazawa City)	2,600
Fukui Pref.	18	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(90)
Nagano Pref.	19	Lake Suwa (center)	150
Shizuoka Pref.	20	Riv. Tenryu (Iwata City)	tr(90)
Aichi Pref.	21	Nagoya Port	200
Mie Pref.	22	Yokkaichi Port	130
Shiga Pref.	23	Lake Biwa (center, offshore of Karasaki)	240
Kyoto Pref.	24	Miyazu Port	tr(110)
Kyoto City	25	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1,000
Osaka Pref.	26	Mouth of Riv. Yamato (Sakai City)	780
Osaka City	27	Osaka Port	790
Hyogo Pref.	28	Offshore of Himeji	tr(80)
Kobe City	29	Kobe Port (center)	tr(100)
Wakayama Pref.	30	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(80)
Okayama Pref.	31	Offshore of Mizushima	tr(90)
Hiroshima Pref.	32	Kure Port	tr(110)
	33	Hiroshima Bay	130
Yamaguchi Pref.	34	Tokuyama Bay	tr(80)
	35	Offshore of Ube	tr(90)
	36	Offshore of Hagi	tr(70)
Tokushima Pref.	37	Mouth of Riv. Yoshino (Tokushima City)	tr(50)
Kagawa Pref.	38	Takamatsu Port	140
Kochi Pref.	39	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	40	Dokai Bay	240
Saga Pref.	41	Imari Bay	120
Nagasaki Pref.	42	Omura Bay	240
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	890
Miyazaki Pref.	44	Mouth of Riv. Oyodo (Miyazaki City)	160
Kagoshima Pref.	45	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(100)
	46	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	690
Okinawa Pref.	47	Naha Port	460

(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.

(Note 3) $\mbox{tr}:$ detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 58/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 58/61\ (Missing\ value: 0) \end{array}$

Detection limit: *55 Quantification limit: *170

	stats
Geometric mean	5,900
Median	6,500
Maximum	720,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1,700
	2	Tomakomai Port	13,000
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	tr(74)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	3,800
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	230
Akita Pref.	6	Lake Hachiro	2,600
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	650
Fukushima Pref.	8	Onahama Port	36,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	310
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	350
Chiba Pref.	11	Coast of Ichihara and Anegasaki	30,000
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	730
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	55,000
Tokyo Wici.	14	Mouth of Riv. Sumida (Minato Ward)	310,000
Yokohama City	15	Yokohama Port	120,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	48,000
Kawasaki City	17	Keihin Canal, Port of Kawasaki	170,000
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	810
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1,100
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	4,800
Fukui Pref.	21	, ,	970
Yamanashi Pref.	22	Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(160)
	23		7,600
Nagano Pref. Shizuoka Pref.		Lake Suwa (center)	
Snizuoka Prei.	24	Shimizu Port Pira Tampa (Junta Cita)	18,000
A :-1-: D£	25	Riv. Tenryu (Iwata City)	190
Aichi Pref.	26	Kinuura Port	13,000
M. D. C	27	Nagoya Port	33,000
Mie Pref.	28	Yokkaichi Port	55,000
CI. D. C	29	Toba Port	100,000
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	6,200
W . D C	31	Lake Biwa (center, offshore of Karasaki)	18,000
Kyoto Pref.	32	Miyazu Port	1,600
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	6,400
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	24,000
Osaka City	35	Osaka Port	720,000
	36	Outside Osaka Port	17,000
	37	Mouth of Riv. Yodo (Osaka City)	59,000
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	260,000
Hyogo Pref.	39	Offshore of Himeji	94,000
Kobe City	40	Kobe Port (center)	270,000
Nara Pref.	41	Riv. Yamato (Oji Town)	1,000
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	6,500
Okayama Pref.	43	Offshore of Mizushima	2,700
Hiroshima Pref.	44	Kure Port	92,000
	45	Hiroshima Bay	24,000
Yamaguchi Pref.	46	Tokuyama Bay	4,600
	47	Offshore of Ube	9,900
	48	Offshore of Hagi	860
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	250
Kagawa Pref.	50	Takamatsu Port	32,000
Ehime Pref.	51	Niihama Port	2,700
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	790
Kitakyushu City	53	Dokai Bay	380,000
Fukuoka City	54	Hakata Bay	8,300
Saga Pref.	55	Imari Bay	6,200
Nagasaki Pref.	56	Omura Bay	7,600
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	620
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
iviiyazaki i ici.			
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
	59 60	Riv. Amori (Kirishima City) Riv. Gotanda (Ichikikushikino City)	nd 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 2) Data treated as detected means detection limit value and more.

⁽Note 3) tr : detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

⁽Note 5) *: indicates the sum value of the Quantification [Detection] limits of each congener.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 51/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 51/61\ (Missing\ value: 0) \\ \end{array}$

Detection limit : 2 Quantification limit : 6

	stats
Geometric mean	46
Median	74
Maximum	2,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(5)
	2	Tomakomai Port	24
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	69
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	23
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	630
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(4)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	190
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	10
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	370
1011/01/1011	14	Mouth of Riv. Sumida (Minato Ward)	2,000
Yokohama City	15	Yokohama Port	1,100
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	97
Tan asam Say	17	Keihin Canal, Port of Kawasaki	1,700
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(3)
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	350
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	9
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	60
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	23	Lake Suwa (center)	74
Shizuoka Pref.	24	Shimizu Port	56
Sinzuoka i iei.	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	75
Alciii I Ici.	27	Nagoya Port	200
Mie Pref.	28	Yokkaichi Port	230
when then	29	Toba Port	65
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	48
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	150
Kyoto Pref.	32	Miyazu Port	24
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	60
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	420
Osaka City	35	Osaka Port	1,600
Osuku City	36	Outside Osaka Port	180
	37	Mouth of Riv. Yodo (Osaka City)	620
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	1,500
Hyogo Pref.	39	Offshore of Himeji	330
Kobe City	40	Kobe Port (center)	440
Nara Pref.	41	Riv. Yamato (Oji Town)	tr(4)
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	310
Okayama Pref.	43	Offshore of Mizushima	72
Hiroshima Pref.	44	Kure Port	170
THOSHIHA FICE.	45	Hiroshima Bay	170
Yamaguchi Pref.	46	Tokuyama Bay	76
i amaguciii Fiei.	47	Offshore of Ube	74
	48	Offshore of Hagi	13
Tokushima Pref.	48	Mouth of Riv. Yoshino (Tokushima City)	nd
	50	Takamatsu Port	140
Kagawa Pref.			
Ehime Pref. Kochi Pref.	51	Niihama Port Mouth of Piv. Shimonto (Shimonto City)	51 tr(2)
	52	Mouth of Riv. Shimanto (Shimanto City) Dokai Bay	tr(2)
Kitakyushu City	53		1,000
Fukuoka City	54	Hakata Bay	100
Saga Pref.	55	Imari Bay	82
Nagasaki Pref.	56	Omura Bay	170
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	9
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
01: 2: 2	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	420

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 59/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 59/61\ (Missing\ value: 0) \\ \end{array}$

Detection limit : 2 Quantification limit : 6

	stats
Geometric mean	320
Median	440
Maximum	29,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	98
	2	Tomakomai Port	740
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	tr(2)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	440
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(5)
Akita Pref.	6	Lake Hachiro	56
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	21
Fukushima Pref.	8	Onahama Port	4,100
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	20
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	36
Chiba Pref.	11	Coast of Ichihara and Anegasaki	1,200
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	38
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	3,600
i okyo iviet.	14	Mouth of Riv. Sumida (Minato Ward)	14.000
Yokohama City	15	Yokohama Port	3,500
•	16		1,600
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	4,700
Niigoto Duof	18	· ·	44
Niigata Pref.		Lower Riv. Shinano (Niigata City)	
Toyama Pref. Ishikawa Pref.	19 20	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City)	55 250
Fukui Pref.	20		93
		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	8
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	
Nagano Pref.	23	Lake Suwa (center)	250
Shizuoka Pref.	24	Shimizu Port	1,400
4:1:D C	25	Riv. Tenryu (Iwata City)	10
Aichi Pref.	26	Kinuura Port	810
14: D C	27	Nagoya Port	2,800
Mie Pref.	28	Yokkaichi Port	3,400
ati n a	29	Toba Port	440
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	210
	31	Lake Biwa (center, offshore of Karasaki)	1,200
Kyoto Pref.	32	Miyazu Port	130
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	770
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	1,600
Osaka City	35	Osaka Port	29,000
	36	Outside Osaka Port	1,400
	37	Mouth of Riv. Yodo (Osaka City)	4,300
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	16,000
Hyogo Pref.	39	Offshore of Himeji	5,600
Kobe City	40	Kobe Port (center)	5,000
Nara Pref.	41	Riv. Yamato (Oji Town)	160
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	2,800
Okayama Pref.	43	Offshore of Mizushima	380
Hiroshima Pref.	44	Kure Port	1,500
	45	Hiroshima Bay	1,500
Yamaguchi Pref.	46	Tokuyama Bay	290
	47	Offshore of Ube	430
	48	Offshore of Hagi	51
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	7
Kagawa Pref.	50	Takamatsu Port	2,600
Ehime Pref.	51	Niihama Port	280
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	19
Kitakyushu City	53	Dokai Bay	6,500
Fukuoka City	54	Hakata Bay	580
Saga Pref.	55	Imari Bay	310
Nagasaki Pref.	56	Omura Bay	510
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	100
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	9
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	3,400
		•	-,

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

$$\label{eq:definition} \begin{split} & Detection \ Frequency \ (site): 61/61 \ (Missing \ value: 0) \\ & Detection \ Frequency \ (sample): 61/61 \ (Missing \ value: 0) \end{split}$$

Detection limit : 4 Quantification limit : 12

	stats
Geometric mean	910
Median	1,100
Maximum	230,000
Minimum	tr(4)

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	290
	2	Tomakomai Port	1,700
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	tr(4)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	610
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	22
Akita Pref.	6	Lake Hachiro	190
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	100
Fukushima Pref.	8	Onahama Port	9,100
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	59
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	120
Chiba Pref.	11	Coast of Ichihara and Anegasaki	6,000
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	160
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	16,000
Tokyo Wici.	14	Mouth of Riv. Sumida (Minato Ward)	62,000
Yokohama City	15	Yokohama Port	14,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	8,300
Kawasaki City	17	Keihin Canal, Port of Kawasaki	23,000
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	140
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	110
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	1,400
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	230
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	14
Nagano Pref.	23	Lake Suwa (center)	1,100
Shizuoka Pref.			-
Snizuoka Prei.	24	Shimizu Port Pire Towara (Iyota City)	5,500
A :-1-: DC	25	Riv. Tenryu (Iwata City)	28
Aichi Pref.	26	Kinuura Port	2,900
M. D. C	27	Nagoya Port	11,000
Mie Pref.	28	Yokkaichi Port	16,000
CI. D. C	29	Toba Port	1,300
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	840
T D. C	31	Lake Biwa (center, offshore of Karasaki)	3,600
Kyoto Pref.	32	Miyazu Port	240
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1,500
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	5,600
Osaka City	35	Osaka Port	230,000
	36	Outside Osaka Port	3,800
	37	Mouth of Riv. Yodo (Osaka City)	12,000
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	55,000
Hyogo Pref.	39	Offshore of Himeji	24,000
Kobe City	40	Kobe Port (center)	20,000
Nara Pref.	41	Riv. Yamato (Oji Town)	84
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,000
Okayama Pref.	43	Offshore of Mizushima	610
Hiroshima Pref.	44	Kure Port	5,400
	45	Hiroshima Bay	3,400
Yamaguchi Pref.	46	Tokuyama Bay	330
	47	Offshore of Ube	900
	48	Offshore of Hagi	18
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	23
Kagawa Pref.	50	Takamatsu Port	12,000
Ehime Pref.	51	Niihama Port	650
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	88
Kitakyushu City	53	Dokai Bay	46,000
Fukuoka City	54	Hakata Bay	1,600
Saga Pref.	55	Imari Bay	940
Nagasaki Pref.	56	Omura Bay	1,200
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	350
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	tr(5)
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	14
	60	Riv. Gotanda (Ichikikushikino City)	tr(4)
Okinawa Pref.	61	Naha Port	6,000
			.,

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

$$\label{eq:definition} \begin{split} & Detection \ Frequency \ (site): 61/61 \ (Missing \ value: 0) \\ & Detection \ Frequency \ (sample): 61/61 \ (Missing \ value: 0) \end{split}$$

Detection limit : 3 Quantification limit : 9

	stats
Geometric mean	1,300
Median	1,400
Maximum	230,000
Minimum	9

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	380
	2	Tomakomai Port	3,200
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	19
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	710
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	30
Akita Pref.	6	Lake Hachiro	420
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	140
Fukushima Pref.	8	Onahama Port	9,400
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	83
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	96
Chiba Pref.	11	Coast of Ichihara and Anegasaki	8,100
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	210
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	18,000
Tonyo men	14	Mouth of Riv. Sumida (Minato Ward)	120.000
Yokohama City	15	Yokohama Port	23,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	14,000
reawasani eny	17	Keihin Canal, Port of Kawasaki	38,000
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	190
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	240
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	1,500
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	400
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	25
Nagano Pref.	23	Lake Suwa (center)	1,600
Shizuoka Pref.	24	Shimizu Port	4,400
Silizuoka 1 ici.	25	Riv. Tenryu (Iwata City)	43
Aichi Pref.	26	Kinuura Port	3,100
Alcili I Ici.	27	Nagoya Port	9,900
Mie Pref.	28	Yokkaichi Port	15,000
WHC I ICI.	29	Toba Port	3,200
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	1,400
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	3,800
Kyoto Pref.	32	Miyazu Port	3,800
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1,400
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	6,900
Osaka City	35	Osaka Port	230,000
Osaka City	36	Outside Osaka Port	3,500
	37	Mouth of Riv. Yodo (Osaka City)	14,000
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	79,000
Hyogo Pref.	39	Offshore of Himeji	28,000
Kobe City	40	Kobe Port (center)	26,000
Nara Pref.	41	Riv. Yamato (Oji Town)	150
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,100
Okayama Pref.	43	Offshore of Mizushima	530
Hiroshima Pref.	43	Kure Port	11,000
niiosiiiiia riei.			
V	45	Hiroshima Bay	4,000
Yamaguchi Pref.	46 47	Tokuyama Bay Offshore of Ube	570 1,700
Toloughima Deaf	48	Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	140 59
Tokushima Pref.		• */	9,200
Kagawa Pref.	50	Takamatsu Port	
Ehime Pref.	51	Niihama Port	560
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	110
Kitakyushu City	53	Dokai Bay	140,000
Fukuoka City	54	Hakata Bay	2,500
Saga Pref.	55	Imari Bay	1,100
Nagasaki Pref.	56	Omura Bay	1,400
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	140
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	9
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	12
	60	Riv. Gotanda (Ichikikushikino City)	9
Okinawa Pref.	61	Naha Port	10,000

⁽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 :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 60/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 60/61\ (Missing\ value: 0) \end{array}$

Detection limit: 0.1 Quantification limit: 0.3

	stats
Geometric mean	39
Median	46
Maximum	5,300
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	8.7
	2	Tomakomai Port	65
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	0.8
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	26
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)	3.7
Fukushima Pref.	8	Onahama Port	220
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.7
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	2.4
Chiba Pref.	11	Coast of Ichihara and Anegasaki	260
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	5.1
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	1,100
Tokyo Wiet.	14	Mouth of Riv. Sumida (Minato Ward)	4,300
Yokohama City	15	Yokohama Port	1,100
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	240
Kawasaki City	17	Keihin Canal, Port of Kawasaki	940
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	5.5
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	5.4
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	3.4
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	2.8
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Snono (1 suruga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	1.1
	23	Lake Suwa (center)	84
Nagano Pref. Shizuoka Pref.			
Snizuoka Prei.	24	Shimizu Port	160
A :-1-: DC	25	Riv. Tenryu (Iwata City)	1.2
Aichi Pref.	26	Kinuura Port	93
M. D. C	27	Nagoya Port	170
Mie Pref.	28	Yokkaichi Port	310
CI. D. C	29	Toba Port	310
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	64
T . D C	31	Lake Biwa (center, offshore of Karasaki)	230
Kyoto Pref.	32	Miyazu Port	12
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	29
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	150
Osaka City	35	Osaka Port	5,300
	36	Outside Osaka Port	320
	37	Mouth of Riv. Yodo (Osaka City)	400
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	1,300
Hyogo Pref.	39	Offshore of Himeji	690
Kobe City	40	Kobe Port (center)	870
Nara Pref.	41	Riv. Yamato (Oji Town)	6.3
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	440
Okayama Pref.	43	Offshore of Mizushima	16
Hiroshima Pref.	44	Kure Port	340
	45	Hiroshima Bay	110
Yamaguchi Pref.	46	Tokuyama Bay	25
	47	Offshore of Ube	39
	48	Offshore of Hagi	4.8
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	1.3
Kagawa Pref.	50	Takamatsu Port	220
Ehime Pref.	51	Niihama Port	15
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	4.8
Kitakyushu City	53	Dokai Bay	2,500
Fukuoka City	54	Hakata Bay	54
Saga Pref.	55	Imari Bay	32
Nagasaki Pref.	56	Omura Bay	46
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	3.5
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	0.4
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	0.4
<i>G</i>	60	Riv. Gotanda (Ichikikushikino City)	0.5
Okinawa Pref.	61	Naha Port	290
OKINGTO I ICI.	01	I rama z est	270

⁽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.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 45/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 45/61\ (Missing\ value: 0) \end{array}$

Detection limit: 0.4 Quantification limit: 1.2

	stats
Geometric mean	2.6
Median	2.0
Maximum	230
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(1.1)
	2	Tomakomai Port	4.3
Iwate Pref.	3	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.	6	Lake Hachiro	2.0
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(0.6)
Fukushima Pref.	8	Onahama Port	12
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	8.2
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	17
Tokyo Wici.	14	Mouth of Riv. Sumida (Minato Ward)	130
Yokohama City	15	Yokohama Port	79
•	16		27
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	84
Niicoto Duof	18	·	nd
Niigata Pref. Toyama Pref.	19	Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	
,			tr(0.4)
Ishikawa Pref. Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(1.1)
			tr(0.4)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	23	Lake Suwa (center)	5.1
Shizuoka Pref.	24	Shimizu Port	7.4
4:1:D C	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	4.7
16. D. C	27	Nagoya Port	8.5
Mie Pref.	28	Yokkaichi Port	22
ati n a	29	Toba Port	87
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	3.5
	31	Lake Biwa (center, offshore of Karasaki)	14
Kyoto Pref.	32	Miyazu Port	tr(0.9)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	4.9
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	11
Osaka City	35	Osaka Port	230
	36	Outside Osaka Port	5.5
	37	Mouth of Riv. Yodo (Osaka City)	9.6
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	74
Hyogo Pref.	39	Offshore of Himeji	24
Kobe City	40	Kobe Port (center)	64
Nara Pref.	41	Riv. Yamato (Oji Town)	tr(0.8)
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1.6
Okayama Pref.	43	Offshore of Mizushima	tr(0.9)
Hiroshima Pref.	44	Kure Port	33
	45	Hiroshima Bay	nd
Yamaguchi Pref.	46	Tokuyama Bay	2.1
	47	Offshore of Ube	2.6
	48	Offshore of Hagi	tr(0.4)
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	9.7
Ehime Pref.	51	Niihama Port	1.3
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(0.8)
Kitakyushu City	53	Dokai Bay	130
Fukuoka City	54	Hakata Bay	nd
Saga Pref.	55	Imari Bay	1.7
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
5	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	24

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 58/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 58/61\ (Missing\ value: 0) \\ \end{array}$

Detection limit : 16 Quantification limit : 48

	stats
Geometric mean	1,200
Median	1,300
Maximum	120,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	560
-	2	Tomakomai Port	2,000
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	49
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	740
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	51
Akita Pref.	6	Lake Hachiro	1,000
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	230
Fukushima Pref.	8	Onahama Port	4,500
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	71
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(45)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	6,900
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	170
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	9,600
1011/0111011	14	Mouth of Riv. Sumida (Minato Ward)	65,000
Yokohama City	15	Yokohama Port	20,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	15,000
rawasan City	17	Keihin Canal, Port of Kawasaki	47,000
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	240
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	180
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	920
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	130
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	52
Nagano Pref.	23	Lake Suwa (center)	2,200
Shizuoka Pref.	24	Shimizu Port	2,000
SHIZUOKA I ICI.	25	Riv. Tenryu (Iwata City)	57
Aichi Pref.	26	Kinuura Port	2,500
Alciii I Ici.	27	Nagoya Port	4900
Mie Pref.	28	Yokkaichi Port	8,900
WHE I ICI.	29	Toba Port	8,600
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	1,800
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	4,900
Kyoto Pref.	32	Miyazu Port	320
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1,500
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	4,900
Osaka City	35	Osaka Port	120,000
Osaka City	36	Outside Osaka Port	2,700
-	37	Mouth of Riv. Yodo (Osaka City)	14,000
-	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	45,000
Hyogo Pref.	39	Offshore of Himeji	20,000
Kobe City	40	Kobe Port (center)	36,000
Nara Pref.	41	Riv. Yamato (Oji Town)	260
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	650
Okayama Pref.	43	Offshore of Mizushima	320
Hiroshima Pref.	44	Kure Port	18,000
mirosinina riei.	45		
V		Hiroshima Bay	4,500
Yamaguchi Pref.	46 47	Tokuyama Bay Offshore of Ube	640 1,300
-			
Tolgushinas Deaf	48	Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	150
Tokushima Pref.		` *′	83 4,300
Kagawa Pref.	50	Takamatsu Port	· · · · · · · · · · · · · · · · · · ·
Ehime Pref.	51	Niihama Port	280
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	210
Kitakyushu City	53	Dokai Bay	81,000
Fukuoka City	54	Hakata Bay	1,700
Saga Pref.	55	Imari Bay	1,000
Nagasaki Pref.	56	Omura Bay	1,300
	57	Mouth of Riv. Oita (Oita City)	tr(26)
Oita Pref.			
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
	58 59	Riv. Amori (Kirishima City)	nd
Miyazaki Pref.	58		

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

$$\label{eq:definition} \begin{split} & Detection \ Frequency \ (site): 61/61 \ (Missing \ value: 0) \\ & Detection \ Frequency \ (sample): 61/61 \ (Missing \ value: 0) \end{split}$$

Detection limit : 0.1 Quantification limit : 0.4

	stats
Geometric mean	80
Median	88
Maximum	8,100
Minimum	0.9

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	36
	2	Tomakomai Port	140
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	4.3
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	52
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	3.6
Akita Pref.	6	Lake Hachiro	66
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	17
Fukushima Pref.	8	Onahama Port	380
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	5.4
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	3.6
Chiba Pref.	11	Coast of Ichihara and Anegasaki	500
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	13
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	540
,	14	Mouth of Riv. Sumida (Minato Ward)	3,400
Yokohama City	15	Yokohama Port	1,500
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	730
Tan asam Say	17	Keihin Canal, Port of Kawasaki	3,600
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	17
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	14
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	62
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	8.3
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	4.1
Nagano Pref.	23	Lake Suwa (center)	140
Shizuoka Pref.	24	Shimizu Port	190
Silizuoka i iei.	25	Riv. Tenryu (Iwata City)	5.0
Aichi Pref.	26	Kinuura Port	180
Alciii I Ici.	27	Nagoya Port	260
Mie Pref.	28	Yokkaichi Port	500
WHC I ICI.	29	Toba Port	280
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	160
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	470
Kyoto Pref.	32	Miyazu Port	30
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	110
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	360
Osaka City	35	Osaka Port	8,100
Озика Спу	36	Outside Osaka Port	190
	37	Mouth of Riv. Yodo (Osaka City)	1,000
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	1,800
Hyogo Pref.	39	Offshore of Himeji	1,200
Kobe City	40	Kobe Port (center)	1,600
Nara Pref.	41	Riv. Yamato (Oji Town)	23
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	48
Okayama Pref.	43	Offshore of Mizushima	19
Hiroshima Pref.	44	Kure Port	610
Throshina Fiel.	45	Hiroshima Bay	200
Yamaguchi Pref.	46	Tokuyama Bay	25
i amaguciii Fici.	47	Offshore of Ube	80
	48	Offshore of Hagi	9.4
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	4.8
Kagawa Pref.	50	Takamatsu Port	370
Ehime Pref.	51	Niihama Port	19
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	17
Kitakyushu City	53	Dokai Bay	7,300
Fukuoka City	54	Hakata Bay	160
Saga Pref.	55	Imari Bay	86
Ü			88
Nagasaki Pref.	56 57	Omura Bay Mouth of Riv. Oita (Oita City)	2.3
Oita Pref.			
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	1.0
Kagoshima Pref.	59	Riv. Amori (Kirishima City) Riv. Gotanda (Ichikikushikino City)	
Okinova Deef	60	**	1.0
Okinawa Pref.	61	Naha Port	510

(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 :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 44/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 44/61\ (Missing\ value: 0) \end{array}$

Detection limit: 0.8 Quantification limit: 2.4

	stats
Geometric mean	4.6
Median	4.1
Maximum	620
Minimum	nd

Isocal communities	Hokkaido Iwate Pref. Miyagi Pref. Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref. Chiba City Tokyo Met. Yokohama City Kawasaki City Niigata Pref. Toyama Pref.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City) Tomakomai Port 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) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	tr(2.3) 8.4 nd 2.5 nd 3.1 tr(1.0) 21 nd nd 14 nd 37 220 69 54
New Perf. 3	Iwate Pref. Miyagi Pref. Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref. Chiba City Tokyo Met. Yokohama City Kawasaki City Niigata Pref. Toyama Pref.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Tomakomai Port 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) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	8.4 nd 2.5 nd 3.1 tr(1.0) 21 nd nd 14 nd 37 220 69 54
Notable Pref. 3 Riv. Tovosway (Hanamaki City) 2.5	Miyagi Pref. Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Chiba Pref. Chiba City Tokyo Met. Yokohama City Kawasaki City Niigata Pref. Toyama Pref.	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	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) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	nd 2.5 nd 3.1 tr(1.0) 21 nd nd 14 nd 37 220 69 54
Mysaga Pref. 4 Sendai Bay (Mastashina Bay) 2.5 Sendai City 5 Hirose-Chashi Bridge, Rev. Hirose (Sendai City) nd Alkin Pref. 6 Lake Hachino 3.1 Vamagata Pref. 7 Mouth of Riv. Magami (Salata City) trt(1.0) Fukushima Pref. 8 Onahama Port 21 Illearial Pref. 9 Tonckamone-shasi Bridge, Mouth of Riv. Tonce (Kamisu City) nd Tochqii Pref. 10 Tagawa Kyubun Area Head Works (Usanomiya City) nd Tochqii Pref. 11 Case Chilaba Pref. 12 Mouth of Riv. Hanami (Chiba City) nd Tokyo Met. 12 Mouth of Riv. Hanami (Chiba City) nd Tokyo Met. 13 Mouth of Riv. Arakwa (Richo Word) 3.7 Tokyo Met. 13 Mouth of Riv. Arakwa (Richo Word) 3.7 Tokyo Met. 15 Volchama City 15 Volchama City 15 Volchama City 17 Kehiba City 17 Kehiba City 18 Volchama City 19 Volchama City 19 Volchama (Nagama City) 19 Volchama City 19 Volchama City 19 Volchama (Nagama City) 10 Volchama City 19 Volchama (Nagama City) 10 Volchama City 10 Volchama	Miyagi Pref. Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Chiba Pref. Chiba City Tokyo Met. Yokohama City Kawasaki City Niigata Pref. Toyama Pref.	4 5 6 7 8 9 10 11 12 13 14 15 16 17	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) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	2.5 nd 3.1 tr(1.0) 21 nd nd 14 nd 37 220 69 54
Sendai City	Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref. Chiba City Tokyo Met. Yokohama City Kawasaki City Niigata Pref. Toyama Pref.	5 6 7 8 9 10 11 12 13 14 15 16 17 18	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) Mouth of Riv. Sumida (Minato Ward) Yokohama Port Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	nd 3.1 tr(1.0) 21 nd nd 14 nd 37 220 69 54
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Texas February F	Yokohama City Kawasaki City Niigata Pref. Toyama Pref.	14 15 16 17 18 19	Mouth of Riv. Sumida (Minato Ward) Yokohama Port Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	220 69 54
Veckohama City	Kawasaki City Niigata Pref. Toyama Pref.	15 16 17 18 19	Yokohama Port Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	69 54
Kawasaki City	Kawasaki City Niigata Pref. Toyama Pref.	16 17 18 19	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	54
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Toyuma Pref. 19	Toyama Pref.	19	(
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Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) nd	Ishikawa Pref.			` /
Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City)			37	
Nagano Pref. 23				
Shizuoka Pref. 24				
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Aichi Pref. 26 Kinuura Port 4.2 27 Nagoya Port 13 3 3 3 3 3 3 3 3				
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29 Toba Port 13 13 13 13 15 15 15 15	Mie Pref.			
Shiga Pref. 30			Toba Port	
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Kyoto Pref. 32 Miyazu Port tr(1.6) Kyoto City 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) 4.1 Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 20 Osaka City 35 Osaka Port 620 36 Outside Osaka Port 8.0 37 Mouth of Riv. Yodo (Osaka City) 58 38 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 110 Hyogo Pref. 39 Offshore of Himeji 73 Kobe City 40 Kobe Port (center) 57 Nara Pref. 41 Riv. Yamato (Oji Town) 40 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 4.0 Okayama Pref. 43 Offshore of Mizushima tr(0.8) Hiroshima Pref. 44 Kure Port 18 47 Offshore of Ube 3.4 48 Offshore of Hagi nd Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) nd Kochi Pref. 50	J	31		25
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Nara Pref. 41 Riv. Yamato (Oji Town) tr(1.0) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 4.0 Okayama Pref. 43 Offshore of Mizushima tr(0.8) Hiroshima Pref. 44 Kure Port 18 45 Hiroshima Bay 7.2 Yamaguchi Pref. 46 Tokuyama Bay nd 47 Offshore of Ube 3.4 48 Offshore of Hagi nd Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) nd Kagawa Pref. 50 Takamatsu Port 19 Ehime Pref. 51 Niihama Port nd Kochi Pref. 52 Mouth of Riv. Shimanto (Shimanto City) tr(1.1) Kitakyushu City 53 Dokai Bay 550 Fukuoka City 54 Hakata Bay 6 Saga Pref. 55 Imari Bay 4.2 Nagasaki Pref. 56 Omura Bay 3.1 Oita Pref. 57 Mouth of Riv.	Hyogo Pref.	39	Offshore of Himeji	73
Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 4.0 Okayama Pref. 43 Offshore of Mizushima tr(0.8) Hiroshima Pref. 44 Kure Port 18 45 Hiroshima Bay 7.2 Yamaguchi Pref. 46 Tokuyama Bay nd 47 Offshore of Ube 3.4 48 Offshore of Hagi nd Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) nd Kagawa Pref. 50 Takamatsu Port 19 Ehime Pref. 51 Niihama Port nd Kochi Pref. 52 Mouth of Riv. Shimanto (Shimanto City) tr(1.1) Kitakyushu City 53 Dokai Bay 550 Fukuoka City 54 Hakata Bay 6 Saga Pref. 55 Imari Bay 4.2 Nagasaki Pref. 56 Omura Bay 3.1 Oita Pref. 57 Mouth of Riv. Oita (Oita City) nd Miyazaki Pref. 58 Mouth	Kobe City	40	Kobe Port (center)	57
Okayama Pref. 43 Offshore of Mizushima tr(0.8) Hiroshima Pref. 44 Kure Port 18 45 Hiroshima Bay 7.2 Yamaguchi Pref. 46 Tokuyama Bay nd 47 Offshore of Ube 3.4 48 Offshore of Hagi nd Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) nd Kagawa Pref. 50 Takamatsu Port 19 Ehime Pref. 51 Niihama Port nd Kochi Pref. 52 Mouth of Riv. Shimanto (Shimanto City) tr(1.1) Kitakyushu City 53 Dokai Bay 550 Fukuoka City 54 Hakata Bay 6 Saga Pref. 55 Imari Bay 4.2 Nagasaki Pref. 56 Omura Bay 3.1 Oita Pref. 57 Mouth of Riv. Oita (Oita City) nd Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) nd	Nara Pref.	41	Riv. Yamato (Oji Town)	tr(1.0)
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48 Offshore of Hagi nd Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) nd Kagawa Pref. 50 Takamatsu Port 19 Ehime Pref. 51 Niihama Port nd Kochi Pref. 52 Mouth of Riv. Shimanto (Shimanto City) tr(1.1) Kitakyushu City 53 Dokai Bay 550 Fukuoka City 54 Hakata Bay 6 Saga Pref. 55 Imari Bay 4.2 Nagasaki Pref. 56 Omura Bay 3.1 Oita Pref. 57 Mouth of Riv. Oita (Oita City) nd Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) nd	Yamaguchi Pref.	46	Tokuyama Bay	nd
Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) nd Kagawa Pref. 50 Takamatsu Port 19 Ehime Pref. 51 Niihama Port nd Kochi Pref. 52 Mouth of Riv. Shimanto (Shimanto City) tr(1.1) Kitakyushu City 53 Dokai Bay 550 Fukuoka City 54 Hakata Bay 6 Saga Pref. 55 Imari Bay 4.2 Nagasaki Pref. 56 Omura Bay 3.1 Oita Pref. 57 Mouth of Riv. Oita (Oita City) nd Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) nd		47	Offshore of Ube	3.4
Kagawa Pref. 50 Takamatsu Port 19 Ehime Pref. 51 Niihama Port nd Kochi Pref. 52 Mouth of Riv. Shimanto (Shimanto City) tr(1.1) Kitakyushu City 53 Dokai Bay 550 Fukuoka City 54 Hakata Bay 6 Saga Pref. 55 Imari Bay 4.2 Nagasaki Pref. 56 Omura Bay 3.1 Oita Pref. 57 Mouth of Riv. Oita (Oita City) nd Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) nd		48	Offshore of Hagi	nd
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Kitakyushu City 53 Dokai Bay 550 Fukuoka City 54 Hakata Bay 6 Saga Pref. 55 Imari Bay 4.2 Nagasaki Pref. 56 Omura Bay 3.1 Oita Pref. 57 Mouth of Riv. Oita (Oita City) nd Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) nd	Ehime Pref.	51	Niihama Port	nd
Fukuoka City 54 Hakata Bay 6 Saga Pref. 55 Imari Bay 4.2 Nagasaki Pref. 56 Omura Bay 3.1 Oita Pref. 57 Mouth of Riv. Oita (Oita City) nd Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) nd	Kochi Pref.		` */	tr(1.1)
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Nagasaki Pref. 56 Omura Bay 3.1 Oita Pref. 57 Mouth of Riv. Oita (Oita City) nd Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) nd				
Oita Pref. 57 Mouth of Riv. Oita (Oita City) nd Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) nd		55	Imari Bay	4.2
Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) nd	Nagasaki Pref.			3.1
		57		nd
	Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref. 59 Riv. Amori (Kirishima City) nd	Kagoshima Pref.	59		nd
60 Riv. Gotanda (Ichikikushikino City) nd			Riv. Gotanda (Ichikikushikino City)	
Okinawa Pref. 61 Naha Port 21	Okinawa Pref.	61	Naha Port	21

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[1-5-3] 2,3',4,4'-5-Pentachlorobiphenyl (#118)/sediment (pg/g-dry)

Monitored year :2018

$$\label{eq:definition} \begin{split} & Detection \ Frequency \ (site): 61/61 \ (Missing \ value: 0) \\ & Detection \ Frequency \ (sample): 61/61 \ (Missing \ value: 0) \end{split}$$

Detection limit : 0.2 Quantification limit : 0.4

	stats
Geometric mean	210
Median	280
Maximum	19,000
Minimum	1.8

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	86
	2	Tomakomai Port	280
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	11
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	170
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	8.3
Akita Pref.	6	Lake Hachiro	190
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	41
Fukushima Pref.	8	Onahama Port	780
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	14
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	8.6
Chiba Pref.	11	Coast of Ichihara and Anegasaki	1,400
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	30
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	1,800
Tokyo Wict.	14	Mouth of Riv. Sumida (Minato Ward)	11,000
Yokohama City	15	Yokohama Port	3,600
•	16		3,100
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	11,000
Milionto Buof	18	·	43
Niigata Pref.	19	Lower Riv. Shinano (Niigata City)	29
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	
Ishikawa Pref. Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	150 16
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	10
Nagano Pref.	23	Lake Suwa (center)	340
Shizuoka Pref.	24	Shimizu Port	380
4:1:D C	25	Riv. Tenryu (Iwata City)	12
Aichi Pref.	26	Kinuura Port	510
) (; D (;	27	Nagoya Port	810
Mie Pref.	28	Yokkaichi Port	1,700
a1: p 0	29	Toba Port	880
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	350
	31	Lake Biwa (center, offshore of Karasaki)	1,000
Kyoto Pref.	32	Miyazu Port	65
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	330
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	820
Osaka City	35	Osaka Port	19,000
	36	Outside Osaka Port	550
	37	Mouth of Riv. Yodo (Osaka City)	2,700
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	6,600
Hyogo Pref.	39	Offshore of Himeji	3,400
Kobe City	40	Kobe Port (center)	5,300
Nara Pref.	41	Riv. Yamato (Oji Town)	53
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	120
Okayama Pref.	43	Offshore of Mizushima	63
Hiroshima Pref.	44	Kure Port	2,400
	45	Hiroshima Bay	730
Yamaguchi Pref.	46	Tokuyama Bay	100
	47	Offshore of Ube	220
	48	Offshore of Hagi	29
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	12
Kagawa Pref.	50	Takamatsu Port	810
Ehime Pref.	51	Niihama Port	55
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	43
Kitakyushu City	53	Dokai Bay	13,000
Fukuoka City	54	Hakata Bay	400
Saga Pref.	55	Imari Bay	200
Nagasaki Pref.	56	Omura Bay	280
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	4.7
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	2.3
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	2.1
<i>G</i>	60	Riv. Gotanda (Ichikikushikino City)	1.8
Okinawa Pref.	61	Naha Port	1,700
	71	la caracter at a con-	1,700

⁽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 :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 56/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 56/61\ (Missing\ value: 0) \end{array}$

Detection limit : 0.2 Quantification limit : 0.5

	stats
Geometric mean	4.1
Median	4.7
Maximum	470
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.3
	2	Tomakomai Port	6.2
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	tr(0.2)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	2.8
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(0.2)
Akita Pref.	6	Lake Hachiro	2.6
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	0.9
Fukushima Pref.	8	Onahama Port	18
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(0.3)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.2)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	21
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	0.5
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	36
1011/01/101	14	Mouth of Riv. Sumida (Minato Ward)	180
Yokohama City	15	Yokohama Port	77
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	39
Tea wasani City	17	Keihin Canal, Port of Kawasaki	180
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	0.8
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	0.8
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	3.5
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(0.3)
Nagano Pref.	23	Lake Suwa (center)	6.1
Shizuoka Pref.	24	Shimizu Port	8.9
Silizuoka 1 ici.	25	Riv. Tenryu (Iwata City)	tr(0.3)
Aichi Pref.	26	Kinuura Port	6.2
Alcili I Ici.	27	Nagoya Port	16
Mie Pref.	28	Yokkaichi Port	31
ivite i ici.	29	Toba Port	11
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	7.2
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	22
Kyoto Pref.	32	Miyazu Port	1.5
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	5.6
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	16
Osaka City	35	Osaka Port	470
Osaka City	36	Outside Osaka Port	9.3
ŀ	37	Mouth of Riv. Yodo (Osaka City)	53
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	120
Hyogo Pref.	39	Offshore of Himeji	64
Kobe City	40	Kobe Port (center)	94
Nara Pref.	41	Riv. Yamato (Oji Town)	1.1
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	2.1
Okayama Pref.	43	Offshore of Mizushima	1.0
Hiroshima Pref.	43	Kure Port	32
fillosiilila Fiel.			12
V	45 46	Hiroshima Bay	
Yamaguchi Pref.	46	Tokuyama Bay	1.6
ŀ		Offshore of Ube	4.1
Toloughier - De-C	48	Offshore of Hagi Mouth of Bir. Vechina (Talaukima Citt.)	0.7
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	16
Ehime Pref.	51	Niihama Port Mouth of Bir. Shimonto (Shimonto City)	1.1
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	0.9
Kitakyushu City	53	Dokai Bay	380
Fukuoka City	54	Hakata Bay	8
Saga Pref.	55	Imari Bay	3.8
Nagasaki Pref.	56	Omura Bay	4.7
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	tr(0.2)
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	28

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 46/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 46/61\ (Missing\ value: 0) \end{array}$

Detection limit: 0.4 Quantification limit: 1.2

	stats
Geometric mean	2.5
Median	2.5
Maximum	120
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.6)
	2	Tomakomai Port	2.1
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	1.9
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	1.9
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	7.7
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	10
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	31
•	14	Mouth of Riv. Sumida (Minato Ward)	54
Yokohama City	15	Yokohama Port	38
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	13
•	17	Keihin Canal, Port of Kawasaki	54
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(0.5)
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.4)
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	1.6
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)	6.5
Shizuoka Pref.	24	Shimizu Port	6.3
	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	4.6
1110111 1 1011	27	Nagoya Port	5.7
Mie Pref.	28	Yokkaichi Port	8.6
1110 1 1011	29	Toba Port	19
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	6.4
	31	Lake Biwa (center, offshore of Karasaki)	12
Kyoto Pref.	32	Miyazu Port	tr(0.8)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(0.9)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	9.9
Osaka City	35	Osaka Port	120
obala ony	36	Outside Osaka Port	9.0
	37	Mouth of Riv. Yodo (Osaka City)	15
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	32
Hyogo Pref.	39	Offshore of Himeji	19
Kobe City	40	Kobe Port (center)	100
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	4.3
Okayama Pref.	43	Offshore of Mizushima	tr(1.0)
Hiroshima Pref.	44	Kure Port	12
Thomana i ici.	45	Hiroshima Bay	6.4
Yamaguchi Pref.	46	Tokuyama Bay	2.3
I dilluguelli I Iel.	47	Offshore of Ube	1.6
	48	Offshore of Hagi	tr(0.4)
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	7.0
Ehime Pref.	51	Niihama Port	tr(1.0)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(0.6)
Kitakyushu City	53	Dokai Bay	95
Fukuoka City	54	Hakata Bay	3
Saga Pref.	55	Imari Bay	2.5
Nagasaki Pref.	56	Omura Bay	3.0
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.			
Kagoshima Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd nd
Kagosiiina Pref.	59	Riv. Amori (Kirishima City) Riv. Gotanda (Ichikikushikino City)	nd
Olrinov- Df	60		nd
Okinawa Pref.	61	Naha Port	20

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 56/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 56/61\ (Missing\ value: 0) \\ \end{array}$

Detection limit : 21 Quantification limit : 63

	stats
Geometric mean	1,000
Median	1,300
Maximum	76,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	350
	2	Tomakomai Port	2,500
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	770
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	72
Akita Pref.	6	Lake Hachiro	700
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	150
Fukushima Pref.	8	Onahama Port	3,800
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(46)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(37)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	5,200
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	110
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	5,400
1 okyo wiet.	14	Mouth of Riv. Sumida (Minato Ward)	30,000
Yokohama City	15	Yokohama Port	26,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	7,100
Kawasaki City	17	Keihin Canal, Port of Kawasaki	37,000
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	150
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	88
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	530
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(41)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(41)
	23	Lake Suwa (center)	` /
Nagano Pref. Shizuoka Pref.			1,700
Snizuoka Prei.	24	Shimizu Port Pir. Turner (Justa Cita)	2,400
Aichi Pref.	25	Riv. Tenryu (Iwata City)	tr(38)
Aichi Prei.	26	Kinuura Port	2,100
M. D. C	27	Nagoya Port	2,900
Mie Pref.	28	Yokkaichi Port	6,600
CI. D. C	29	Toba Port	36,000
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	1,300
T . D C	31	Lake Biwa (center, offshore of Karasaki)	3,900
Kyoto Pref.	32	Miyazu Port	340
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1,000
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	3,600
Osaka City	35	Osaka Port	76,000
	36	Outside Osaka Port	2,900
	37	Mouth of Riv. Yodo (Osaka City)	11,000
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	37,000
Hyogo Pref.	39	Offshore of Himeji	13,000
Kobe City	40	Kobe Port (center)	76,000
Nara Pref.	41	Riv. Yamato (Oji Town)	270
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	440
Okayama Pref.	43	Offshore of Mizushima	440
Hiroshima Pref.	44	Kure Port	29,000
	45	Hiroshima Bay	6,200
Yamaguchi Pref.	46	Tokuyama Bay	1,200
	47	Offshore of Ube	1,900
	48	Offshore of Hagi	250
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(59)
Kagawa Pref.	50	Takamatsu Port	2,700
Ehime Pref.	51	Niihama Port	320
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	210
Kitakyushu City	53	Dokai Bay	50,000
Fukuoka City	54	Hakata Bay	1,200
Saga Pref.	55	Imari Bay	1,500
Nagasaki Pref.	56	Omura Bay	1,700
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
<i>G</i> 2 2 2 2 1	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	29,000
Okinawa FICI.	UΙ	Ivana i Oit	49,000

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 60/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 60/61\ (Missing\ value: 0) \end{array}$

Detection limit : 0.2 Quantification limit : 0.5

	stats
Geometric mean	25
Median	28
Maximum	2,100
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	12
11011111111111	2	Tomakomai Port	40
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	1.3
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	16
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	1.7
Akita Pref.	6	Lake Hachiro	23
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	5.5
Fukushima Pref.	8	Onahama Port	100
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1.4
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	1.2
Chiba Pref.	11	Coast of Ichihara and Anegasaki	94
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	3.2
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	140
,	14	Mouth of Riv. Sumida (Minato Ward)	820
Yokohama City	15	Yokohama Port	490
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	240
124454111 0109	17	Keihin Canal, Port of Kawasaki	1,100
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	5.0
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	2.9
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	16
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.2
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	1.4
Nagano Pref.	23	Lake Suwa (center)	49
Shizuoka Pref.	24	Shimizu Port	56
Sinzuoka i ici.	25	Riv. Tenryu (Iwata City)	1.5
Aichi Pref.	26	Kinuura Port	36
Alcili I Ici.	27	Nagoya Port	67
Mie Pref.	28	Yokkaichi Port	160
IVIIC I ICI.	29	Toba Port	560
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	47
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	170
Kyoto Pref.	32	Miyazu Port	8.3
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	45
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	120
Osaka City	35	Osaka Port	2,100
Osaka City	36	Outside Osaka Port	72
ŀ	37	Mouth of Riv. Yodo (Osaka City)	350
ŀ	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	780
Hyogo Pref.	39	Offshore of Himeji	400
Kobe City	40	Kobe Port (center)	1,200
Nara Pref.	41	Riv. Yamato (Oji Town)	9.1
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	14
Okayama Pref.	43	Offshore of Mizushima	6.4
Hiroshima Pref.	44	Kure Port	340
Tillosiillia Fici.	45	Hiroshima Bay	79
Yamaguchi Pref.	46	Tokuyama Bay	11
i amagucini riei.	47	Offshore of Ube	29
ŀ	48	Offshore of Hagi	4.4
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	1.3
	50	Takamatsu Port	81
Kagawa Pref. Ehime Pref.	51		4.9
Kochi Pref.		Niihama Port	
	52	Mouth of Riv. Shimanto (Shimanto City) Dokai Bay	5.7
Kitakyushu City	53		1,000
Fukuoka City	54	Hakata Bay	28
Saga Pref.	55	Imari Bay	28
Nagasaki Pref.	56	Omura Bay	28
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	tr(0.4)
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	tr(0.3)
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
01: 7.0	60	Riv. Gotanda (Ichikikushikino City)	tr(0.4)
Okinawa Pref.	61	Naha Port	450

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 57/61\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 57/61\ (Missing\ value: 0)$

Detection limit : 0.1 Quantification limit : 0.3

	stats
Geometric mean	5.3
Median	5.3
Maximum	460
Minimum	nd

Ilokado	Local communities	No	Monitored sites	measured value
Swate Perf. 3 Riv. Toyosawa (Hammah City) 0.3	Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	2.5
Myspac Bref. 4 Sendal Bay (Matsunhima Bay) 3.9		2	Tomakomai Port	5.0
Sendia City	Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	0.3
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Fukus Perf. S. Onahama Perf Danabama P	Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	1.3
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Tochig Pref. 10 Tagawa Kyubun Area Head Works (Usunomiya City) 0.3	Ibaraki Pref.		Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	0.4
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14 Mouth of Riv. Sumida (Minato Ward) 190				
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	Kagoshima Pref.	59		nd
Okinawa Pref. 61 Naha Port 50		60	Riv. Gotanda (Ichikikushikino City)	nd
	Okinawa Pref.	61	Naha Port	50

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 57/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 57/61\ (Missing\ value: 0) \end{array}$

Detection limit : 0.3 Quantification limit : 0.7

	stats
Geometric mean	11
Median	13
Maximum	820
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	4.3
ļ	2	Tomakomai Port	13
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	tr(0.3)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	7.9
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(0.6)
Akita Pref.	6	Lake Hachiro	9.8
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	2.3
Fukushima Pref.	8	Onahama Port	37
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(0.6)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.5)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	53
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	1.3
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	63
ĺ	14	Mouth of Riv. Sumida (Minato Ward)	320
Yokohama City	15	Yokohama Port	240
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	96
	17	Keihin Canal, Port of Kawasaki	500
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	2.0
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1.3
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	6.0
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.5)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	0.7
Nagano Pref.	23	Lake Suwa (center)	19
Shizuoka Pref.	24	Shimizu Port	24
Sinzaoka i iei.	25	Riv. Tenryu (Iwata City)	tr(0.6)
Aichi Pref.	26	Kinuura Port	19
Alem Frei.	27	Nagoya Port	30
Mie Pref.	28	Yokkaichi Port	70
WHE TIEL	29	Toba Port	200
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	19
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	57
Kyoto Pref.	32	Miyazu Port	3.3
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	17
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	41
Osaka Pier. Osaka City	35	Osaka Port	820
Osaka City	36	Outside Osaka Port	29
H	37	Mouth of Riv. Yodo (Osaka City)	140
H	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	300
Haraga Deaf	39		170
Hyogo Pref.	40	Offshore of Himeji	470
Kobe City		Kobe Port (center)	
Nara Pref.	41	Riv. Yamato (Oji Town)	3.7
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	5.5
Okayama Pref.	43	Offshore of Mizushima	3.0
Hiroshima Pref.	44	Kure Port	160
V1' D C	45	Hiroshima Bay	40
Yamaguchi Pref.	46	Tokuyama Bay	5.4
ļ-	47	Offshore of Ube	11
T 1 1' D C	48	Offshore of Hagi	1.8
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	0.7
Kagawa Pref.	50	Takamatsu Port	33
Ehime Pref.	5.1	Niihama Port	2.4
	51	M 4 CD; C1; 4 (C1; 4 C; 4)	
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	2.4
Kitakyushu City	52 53	Dokai Bay	2.4 400
Kitakyushu City Fukuoka City	52 53 54	Dokai Bay Hakata Bay	2.4 400 13
Kitakyushu City Fukuoka City Saga Pref.	52 53 54 55	Dokai Bay Hakata Bay Imari Bay	2.4 400 13 12
Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref.	52 53 54 55 56	Dokai Bay Hakata Bay Imari Bay Omura Bay	2.4 400 13 12 14
Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref.	52 53 54 55 56 57	Dokai Bay Hakata Bay Imari Bay Omura Bay Mouth of Riv. Oita (Oita City)	2.4 400 13 12 14 nd
Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref. Miyazaki Pref.	52 53 54 55 56 57 58	Dokai Bay Hakata Bay Imari Bay Omura Bay Mouth of Riv. Oita (Oita City) Mouth of Riv. Oyodo (Miyazaki City)	2.4 400 13 12 14 nd nd
Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref.	52 53 54 55 56 57	Dokai Bay Hakata Bay Imari Bay Omura Bay Mouth of Riv. Oita (Oita City) Mouth of Riv. Oyodo (Miyazaki City) Riv. Amori (Kirishima City)	2.4 400 13 12 14 nd
Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref. Miyazaki Pref.	52 53 54 55 56 57 58	Dokai Bay Hakata Bay Imari Bay Omura Bay Mouth of Riv. Oita (Oita City) Mouth of Riv. Oyodo (Miyazaki City)	2.4 400 13 12 14 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 2) Data treated as detected means detection limit value and more.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 16/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 16/61\ (Missing\ value: 0) \end{array}$

Detection limit : 3 Quantification limit : 9

	stats
Geometric mean	nd
Median	nd
Maximum	130
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
	2	Tomakomai Port	tr(5)
Iwate Pref.	3	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	tr(6)
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	tr(6)
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	tr(4)
Tonyo men	14	Mouth of Riv. Sumida (Minato Ward)	tr(8)
Yokohama City	15	Yokohama Port	26
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	nd
reawasaki City	17	Keihin Canal, Port of Kawasaki	13
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
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)	tr(4)
Shizuoka Pref.	24	Shimizu Port	nd
Sinzuoka i ici.	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
Alem Fier.	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	nd
WHE TIEL.	29	Toba Port	tr(7)
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	tr(3)
Singa i ici.	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.	34	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	35	Osaka Port	32
Osaka City	36	Outside Osaka Port	nd
-	37	Mouth of Riv. Yodo (Osaka City)	nd
-	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	13
Hyogo Pref.	39	Offshore of Himeji	nd
Kobe City	40	Kobe Port (center)	130
Nara Pref.	41	Riv. Yamato (Oii Town)	nd
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	tr(5)
THOSHIII IICI.	45	Hiroshima Bay	nd
Yamaguchi Pref.	46	Tokuyama Bay	nd
i amaguem r ici.	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	nd
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	25
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)	
	58	Mouth of Riv. Oyodo (Miyazaki City)	nd nd
Miyazaki Pref.	59		
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd nd
Olsim P. C	60	Riv. Gotanda (Ichikikushikino City)	nd 26
Okinawa Pref.	61	Naha Port	26

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 56/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 56/61\ (Missing\ value: 0) \end{array}$

Detection limit : 6 Quantification limit : 18

	stats
Geometric mean	390
Median	530
Maximum	80,000
Minimum	nd

Local communities	measured value 51 2,100 nd 360 46 140 tr(7) 2,000 tr(11) tr(10) 2,200 29 1,300 8,200 19,000 1,600 13,000 36 33 180
Iwate Pref. 3 Riv. Toyosawa (Hanamaki City)	nd 360 46 140 tr(7) 2,000 tr(11) tr(10) 2,200 29 1,300 8,200 19,000 1,600 13,000 36 33 180
Miyagi Pref. 4 Sendai Bay (Matsushima Bay) Sendai City 5 Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Akita Pref. 6 Lake Hachiro Yamagata Pref. 7 Mouth of Riv. Mogami (Sakata City) Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki Chiba City 12 Mouth of Riv. Hanami (Chiba City) Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 14 Mouth of Riv. Sumida (Minato Ward) Yokohama City 15 Yokohama Port Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) Toyama Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Yamanashi Pref. 21 Mishima-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	nd 360 46 140 tr(7) 2,000 tr(11) tr(10) 2,200 29 1,300 8,200 19,000 1,600 13,000 36 33 180
Miyagi Pref. 4 Sendai Bay (Matsushima Bay) Sendai City 5 Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Akita Pref. 6 Lake Hachiro Yamagata Pref. 7 Mouth of Riv. Mogami (Sakata City) Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki Chiba City 12 Mouth of Riv. Hanami (Chiba City) Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 14 Mouth of Riv. Sumida (Minato Ward) Yokohama City 15 Yokohama Port Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) Toyama Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Yamanashi Pref. 21 Mishima-bashi Bridge, Riv. Arakawa (Kofu City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	46 140 tr(7) 2,000 tr(11) tr(10) 2,200 29 1,300 8,200 19,000 1,600 13,000 36 33 180
Sendai City 5 Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Akita Pref. 6 Lake Hachiro Yamagata Pref. 7 Mouth of Riv. Mogami (Sakata City) Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki Chiba City 12 Mouth of Riv. Hanami (Chiba City) Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 14 Mouth of Riv. Sumida (Minato Ward) Yokohama City 15 Yokohama Port Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) Toyama Pref. 18 Lower Riv. Shinano (Niigata City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	140 tr(7) 2,000 tr(11) tr(10) 2,200 29 1,300 8,200 19,000 1,600 13,000 36 33 180
Akita Pref. 6 Lake Hachiro Yamagata Pref. 7 Mouth of Riv. Mogami (Sakata City) Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki Chiba City 12 Mouth of Riv. Hanami (Chiba City) Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 14 Mouth of Riv. Sumida (Minato Ward) Yokohama City 15 Yokohama Port Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) I7 Keihin Canal, Port of Kawasaki Niigata Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	tr(7) 2,000 tr(11) tr(10) 2,200 29 1,300 8,200 19,000 1,600 13,000 36 33 180
Yamagata Pref.7Mouth of Riv. Mogami (Sakata City)Fukushima Pref.8Onahama PortIbaraki Pref.9Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)Tochigi Pref.10Tagawa Kyubun Area Head Works (Utsunomiya City)Chiba Pref.11Coast of Ichihara and AnegasakiChiba City12Mouth of Riv. Hanami (Chiba City)Tokyo Met.13Mouth of Riv. Arakawa (Koto Ward)14Mouth of Riv. Sumida (Minato Ward)Yokohama City15Yokohama PortKawasaki City16Mouth of Riv. Tama (Kawasaki City)17Keihin Canal, Port of KawasakiNiigata Pref.18Lower Riv. Shinano (Niigata City)Toyama Pref.19Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)Ishikawa Pref.20Mouth of Riv. Sai (Kanazawa City)Fukui Pref.21Mishima-bashi Bridge, Riv. Shono (Tsuruga City)Yamanashi Pref.22Senshu-bashi Bridge, Riv. Arakawa (Kofu City)Nagano Pref.23Lake Suwa (center)	tr(7) 2,000 tr(11) tr(10) 2,200 29 1,300 8,200 19,000 1,600 13,000 36 33 180
Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki Chiba City 12 Mouth of Riv. Hanami (Chiba City) Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 14 Mouth of Riv. Sumida (Minato Ward) Yokohama City 15 Yokohama Port Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 17 Keihin Canal, Port of Kawasaki Niigata Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	2,000 tr(11) tr(10) 2,200 29 1,300 8,200 19,000 1,600 13,000 36 33 180
Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(11) tr(10) 2,200 29 1,300 8,200 19,000 1,600 13,000 36 33 180
Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki Chiba City 12 Mouth of Riv. Hanami (Chiba City) Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 14 Mouth of Riv. Sumida (Minato Ward) Yokohama City 15 Yokohama Port Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 17 Keihin Canal, Port of Kawasaki Niigata Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	tr(10) 2,200 29 1,300 8,200 19,000 1,600 13,000 36 33 180
Chiba Pref. 11 Coast of Ichihara and Anegasaki Chiba City 12 Mouth of Riv. Hanami (Chiba City) Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 14 Mouth of Riv. Sumida (Minato Ward) Yokohama City 15 Yokohama Port Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 17 Keihin Canal, Port of Kawasaki Niigata Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	2,200 29 1,300 8,200 19,000 1,600 13,000 36 33 180
Chiba City 12 Mouth of Riv. Hanami (Chiba City) Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 14 Mouth of Riv. Sumida (Minato Ward) Yokohama City 15 Yokohama Port Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 17 Keihin Canal, Port of Kawasaki Niigata Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	29 1,300 8,200 19,000 1,600 13,000 36 33 180
Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 14 Mouth of Riv. Sumida (Minato Ward) Yokohama City 15 Yokohama Port Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 17 Keihin Canal, Port of Kawasaki Niigata Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	1,300 8,200 19,000 1,600 13,000 36 33 180
14 Mouth of Riv. Sumida (Minato Ward) Yokohama City 15 Yokohama Port Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 17 Keihin Canal, Port of Kawasaki Niigata Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	8,200 19,000 1,600 13,000 36 33 180
Yokohama City 15 Yokohama Port Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 17 Keihin Canal, Port of Kawasaki Niigata Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	19,000 1,600 13,000 36 33 180
Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 17 Keihin Canal, Port of Kawasaki Niigata Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	1,600 13,000 36 33 180
17 Keihin Canal, Port of Kawasaki Niigata Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	13,000 36 33 180
Niigata Pref. 18 Lower Riv. Shinano (Niigata City) Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	36 33 180
Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	33 180
Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	180
Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	
Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Nagano Pref. 23 Lake Suwa (center)	tr(11)
Nagano Pref. 23 Lake Suwa (center)	tr(10)
	530
Onnew Trees E Online I Off	2,000
25 Riv. Tenryu (Iwata City)	tr(12)
Aichi Pref. 26 Kinuura Port	920
27 Nagoya Port	1,100
Mie Pref. 28 Yokkaichi Port	3,600
29 Toba Port	41,000
Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira)	480
31 Lake Biwa (center, offshore of Karasaki)	790
Kyoto Pref. 32 Miyazu Port	160
Kyoto City 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	170
Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City)	1,100
Osaka City 35 Osaka Port	28,000
36 Outside Osaka Port	1,800
37 Mouth of Riv. Yodo (Osaka City)	2,600
38 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	21,000
Hyogo Pref. 39 Offshore of Himeji	2,900
Kobe City 40 Kobe Port (center)	80,000
Nara Pref. 41 Riv. Yamato (Oji Town)	75
Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	150
Okayama Pref. 43 Offshore of Mizushima	240
Hiroshima Pref. 44 Kure Port	20,000
, , , , , , , , , , , , , , , , , , ,	3,200
Yamaguchi Pref. 46 Tokuyama Bay 47 Offshore of Ube	1,100
	2,600
	180
· · · · · · · · · · · · · · · · · · ·	tr(13) 910
Kagawa Pref. 50 Takamatsu Port	
Ehime Pref. 51 Niihama Port	180
Kochi Pref. 52 Mouth of Riv. Shimanto (Shimanto City)	120
Kitakyushu City 53 Dokai Bay	38,000
Fukuoka City 54 Hakata Bay	490
Saga Pref. 55 Imari Bay	990
Nagasaki Pref. 56 Omura Bay	970
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	22,000

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 45/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 45/61\ (Missing\ value: 0) \end{array}$

Detection limit : 7 Quantification limit : 21

	stats
Geometric mean	59
Median	75
Maximum	8,100
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(8)
	2	Tomakomai Port	190
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	34
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	tr(20)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	210
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	230
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	160
•	14	Mouth of Riv. Sumida (Minato Ward)	960
Yokohama City	15	Yokohama Port	2,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	240
_	17	Keihin Canal, Port of Kawasaki	1,600
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)	21
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)	75
Shizuoka Pref.	24	Shimizu Port	220
	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	92
	27	Nagoya Port	120
Mie Pref.	28	Yokkaichi Port	370
	29	Toba Port	4,300
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	61
	31	Lake Biwa (center, offshore of Karasaki)	130
Kyoto Pref.	32	Miyazu Port	tr(16)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	32
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	150
Osaka City	35	Osaka Port	3,300
	36	Outside Osaka Port	200
	37	Mouth of Riv. Yodo (Osaka City)	370
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	2,200
Hyogo Pref.	39	Offshore of Himeji	420
Kobe City	40	Kobe Port (center)	8,100
Nara Pref.	41	Riv. Yamato (Oji Town)	tr(11)
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(18)
Okayama Pref.	43	Offshore of Mizushima	22
Hiroshima Pref.	44	Kure Port	1,800
	45	Hiroshima Bay	260
Yamaguchi Pref.	46	Tokuyama Bay	92
	47	Offshore of Ube	280
	48	Offshore of Hagi	tr(18)
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	120
Ehime Pref.	51	Niihama Port	tr(12)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(12)
Kitakyushu City	53	Dokai Bay	3,800
Fukuoka City	54	Hakata Bay	47
Saga Pref.	55	Imari Bay	93
Nagasaki Pref.	56	Omura Bay	93
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	2,600

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 60/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 60/61\ (Missing\ value: 0) \end{array}$

Detection limit: 0.3 Quantification limit: 0.7

	stats
Geometric mean	110
Median	140
Maximum	24,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	21
	2	Tomakomai Port	610
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	1.5
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	100
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	22
Akita Pref.	6	Lake Hachiro	43
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	7.0
Fukushima Pref.	8	Onahama Port	590
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	3.0
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	2.8
Chiba Pref.	11	Coast of Ichihara and Anegasaki	570
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	8.5
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	330
Tokyo Wict.	14	Mouth of Riv. Sumida (Minato Ward)	2,100
Yokohama City	15	Yokohama Port	5,200
•	16		410
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	3,800
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	11
		()	
Toyama Pref. Ishikawa Pref.	19 20	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City)	9.4
Fukui Pref.	20	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	3.1
		5 ·	
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	2.8
Nagano Pref.	23	Lake Suwa (center)	130
Shizuoka Pref.	24	Shimizu Port	600
4:1:D C	25	Riv. Tenryu (Iwata City)	3.9
Aichi Pref.	26	Kinuura Port	210
16. D. C	27	Nagoya Port	290
Mie Pref.	28	Yokkaichi Port	990
ati n a	29	Toba Port	11,000
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	120
	31	Lake Biwa (center, offshore of Karasaki)	190
Kyoto Pref.	32	Miyazu Port	36
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	50
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	320
Osaka City	35	Osaka Port	8,200
	36	Outside Osaka Port	530
	37	Mouth of Riv. Yodo (Osaka City)	730
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	5,200
Hyogo Pref.	39	Offshore of Himeji	810
Kobe City	40	Kobe Port (center)	24,000
Nara Pref.	41	Riv. Yamato (Oji Town)	22
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	48
Okayama Pref.	43	Offshore of Mizushima	61
Hiroshima Pref.	44	Kure Port	5,300
	45	Hiroshima Bay	700
Yamaguchi Pref.	46	Tokuyama Bay	270
	47	Offshore of Ube	770
	48	Offshore of Hagi	51
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	3.7
Kagawa Pref.	50	Takamatsu Port	250
Ehime Pref.	51	Niihama Port	37
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	33
Kitakyushu City	53	Dokai Bay	8,900
Fukuoka City	54	Hakata Bay	140
Saga Pref.	55	Imari Bay	280
Nagasaki Pref.	56	Omura Bay	260
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	1.3
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	0.8
5	60	Riv. Gotanda (Ichikikushikino City)	1.7
Okinawa Pref.	61	Naha Port	6,400
J	J1		0,100

⁽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)/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 43/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 43/61\ (Missing\ value: 0) \end{array}$

Detection limit : 0.4 Quantification limit : 1.2

	stats
Geometric mean	2.8
Median	4.1
Maximum	300
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.6)
	2	Tomakomai Port	5.1
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	2.0
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	1.6
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	9.2
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	9.9
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	11
ĺ	14	Mouth of Riv. Sumida (Minato Ward)	51
Yokohama City	15	Yokohama Port	82
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	14
 	17	Keihin Canal, Port of Kawasaki	80
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(0.4)
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	tr(1.1)
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)	4.6
Shizuoka Pref.	24	Shimizu Port	8.2
- Simulation in the simulation	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	4.3
7 Helli I Iei.	27	Nagoya Port	5.6
Mie Pref.	28	Yokkaichi Port	16
WHE THEI.	29	Toba Port	170
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	5.4
Singa i rei.	31	Lake Biwa (center, offshore of Karasaki)	8.9
Kyoto Pref.	32	Miyazu Port	tr(1.0)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1.7
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	7.2
Osaka City	35	Osaka Port	160
Osuku City	36	Outside Osaka Port	9.0
-	37	Mouth of Riv. Yodo (Osaka City)	18
-	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	86
Hyogo Pref.	39	Offshore of Himeji	23
Kobe City	40	Kobe Port (center)	300
Nara Pref.	41	Riv. Yamato (Oii Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(1.0)
Okayama Pref.	43	Offshore of Mizushima	nd
Hiroshima Pref.	44	Kure Port	63
Throshmia Fiel.	45	Hiroshima Bay	11
Yamaguchi Pref.	46	Tokuyama Bay	nd
- unagaom r roi.	47	Offshore of Ube	9.1
-	48	Offshore of Hagi	tr(0.8)
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	5.1
Ehime Pref.	51	Niihama Port	tr(0.9)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(0.7)
Kitakyushu City	53	Dokai Bay	120
Fukuoka City	54	Hakata Bay	3
Saga Pref.	55	Imari Bay	4.1
Nagasaki Pref.	56	Omura Bay	4.1
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	
	58		nd nd
Miyazaki Pref.	59	Mouth of Riv. Oyodo (Miyazaki City)	
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd nd
Olsim P. C	60	Riv. Gotanda (Ichikikushikino City)	nd 97
Okinawa Pref.	61	Naha Port	87

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 55/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 55/61\ (Missing\ value: 0) \end{array}$

Detection limit: 0.5 Quantification limit: 1.5

	stats
Geometric mean	69
Median	110
Maximum	21,000
Minimum	nd

Hokkarido	ocal communities	No	Monitored sites	measured value
Vanish Pref. 4 Sendai Bay (Massahima Bay) 82, 2 Sendai City 5 Sendai C				
Myaga Pref. 4 Sendai Bay (Massabinna Bay) 82. Sendai Gay 5 Illivos-cohabil Bridge, R. Hirose (Sendai City) 5.5 Akira Pref. 6 Iake Hachito 2.0 Akira Pref. 7 Mouth of Riv. Mougami (Sakata City) 1.6 Puksabina Pref. 8 Onabama Port 450 Daraki Pref. 17 Tonekamome-obasi Bridge, Mouth of Riv. Tone (Kamisu City) 2.6 Chiba City 17 Tonekamome-obasi Bridge, Mouth of Riv. Tone (Kamisu City) 1.6 Chiba City 17 Coast of Ichibarat and Anegasaki 420 Chiba City 12 Mouth of Riv. Hanami (Chiba City) 4.0 Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 2.20 Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 2.20 Tokyo Met. 14 Mouth of Riv. Arakawa (Koto Ward) 2.20 Tokyo Met. 15 Mouth of Riv. Arakawa (Koto Ward) 2.20 Tokyo Met. 16 Mouth of Riv. Tone (Minato Ward) 1.600 Yokohama City 16 Mouth of Riv. Tone (Kawasaki City) 4.20 Niigata Pref. 18 Lower Riv. Shinano (Nijata City) 2.70 Niigata Pref. 19 Mouth of Riv. Tone (Kawasaki City) 2.70 Niigata Pref. 19 Mouth of Riv. Tone (Kawasaki City) 5.0 Toyana Pref. 19 Mapira-bashi Bridge, Mouth of Riv. Jintsu (Toyana City) 5.0 Fukui Pref. 20 Mouth of Riv. Shinano (Tsunga City) 5.0 Pananashi Pref. 21 Mohima-bashi Bridge, Riv. Shono (Tsunga City) 2.0 Mie Pref. 22 Savia (center) 110 Nagano Pref. 23 Lake Stawa (center) 110 Nigata Pref. 24 Shiniza Port 120 Mie Pref. 25 Riv. Tennyu (Iwata City) 1.20 Nigapa Pref. 26 Kimium Port 1.90 Nigapa Pref. 30 Cake Bwa (center, offshore of Minamhira) 1.20 Nigapa Pref. 31 Lake Bwa (center, offshore of Minamhira) 1.20 Nigapa Pref. 32 Mouth of Riv. Shinano (Shina City) 1.40 Nan Pref. 31 Kase Bwa (center, offshore of Minamhira) 1.20 Napapa Pref. 31 Mouth of Riv. Yamato (Sakai City) 1.40 Napapa Pref. 32 Mouth of Riv. Shinano (Sakai City) 1.40 Napapa Pref. 34 Mouth of Riv. Shinano (Sakai City) 1.40 Napapa Pref.				480
Mysagi Pref. 4 Sendai Bay (Massahima Bay) 82.	Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Sendia City	Miyagi Pref.		Sendai Bay (Matsushima Bay)	82
Vannagah Pref. 7				5.5
Bubarki Pref. 8	Akita Pref.	6	Lake Hachiro	20
Bubarki Pref. 8				
Ibbraich Pref. 9 Tonekamome-obasi Bridge, Mouth of Riv. Tones (Kamisu City) 1.6				
Tochig Pref.				
Chiba Perf.				
Chha City	Ü		C 7 7/	
Tokyo Met.				
Mouth of Riv. Sumida (Mintot Ward)	-		` */	
Velobaman City	Tony o milen			
Kawasaki City	Vokohama City			
Nigata Pref. 18				· ·
Niigata Pref. 18	rawasaki City			
Toyama Pref. 19	Niioata Pref		· ·	
Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) 19			(U)	
Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 2.0 2	-			
Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) trt(1.4) Nagano Pref. 23 Lake Suwa (center) 110 Shizuoka Pref. 24 Shimizu Port 430 Shizuoka Pref. 25 Riv. Tenryu (Iwata City) 2.2 Aichi Pref. 26 Kinuura Port 190 Me Pref. 28 Vokkaichi Port 210 Me Pref. 28 Vokkaichi Port 890 29 Toba Port 13,000 Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 120 Kyoto Pref. 32 Miyazu Port 42 Kyoto City 33 Miyazu Port 42 Kyoto City 33 Miyazu Port 240 Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 14 Osaka City 35 Osaka Port 5,300 Jay Outside Osaka Port 450 Kobe City 40 Osaka Port 420 Kobe City 40 Kobe Port (center) </td <td></td> <td></td> <td>`</td> <td></td>			`	
Nagano Pref. 23 Lake Suwa (center) 110 Shizuoka Pref. 24 Shimizu Port 430 25 Kiv. Tenryu (Iwata City) 2.2 Aichi Pref. 26 Kiw. Tenryu (Iwata City) 210 Mie Pref. 28 Nyakachi Port 291 Mie Pref. 28 Yokkaichi Port 890 Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 120 Shiga Pref. 31 Lake Biwa (center, offshore of Karasaki) 110 Kyoto City 32 Miyazu Port 42 Kyoto City 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) 14 Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 240 Osaka City 35 Osaka Port 5,300 36 Outside Osaka Port 430 45 36 Outside Osaka Port 430 Kobe City 40 Kobe Port (center) 21,000 Nara Pref. 41 Kiwa Kayama Pref. 42 Kobe Port (center) 30 <td></td> <td></td> <td></td> <td></td>				
Shizuoka Pref. 24 Shimizu Port 25 Riv. Tenryu (Iwata City) 2.2 2.5 2				
Aichi Pref. 26 Kimuura Port 190			` /	
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Mie Pref. 28 Yokkachi Port 890 29 Toba Port 13,000 Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 120 Kyoto Pref. 31 Lake Biwa (center, offshore of Karasaki) 110 Kyoto Pref. 32 Miyazua Port 42 Kyoto City 33 Miyazua Port 240 Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 240 Osaka City 35 Osaka Port 5,300 36 Outside Osaka Port 430 37 Mouth of Riv. Yodo (Osaka City) 450 38 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 5,300 Hyogo Pref. 39 Offshore of Himeji 420 Kobe City 40 Kobe Port (center) 21,000 Nara Pref. 41 Riv. Yamato (Oji Town) 14 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 35 Hiroshima Pref. 44 Kure Port 6,000 Yamaguchi Pref.	Aichi Pref			
Mie Pref. 28 Vokkaichi Port 890 29 Toba Port 13,000 Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 120 Kyoto Pref. 32 Miyazu Port 42 Kyoto City 33 Miyazua Port 42 Kyoto City 33 Mouth of Riv. Yamato (Sakai City) 240 Osaka City 35 Osaka Port 5,300 Osaka City 36 Outside Osaka Port 430 37 Mouth of Riv. Yodo (Osaka City) 5,300 38 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 5,300 Hyogo Pref. 39 Offshore of Himeji 420 Kobe City 40 Kobe Port (center) 21,000 Nara Pref. 41 Riv. Yamato (Oji Town) 14 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 30 Okayama Pref. 43 Offshore of Mizushima 55 Hiroshima Pref. 44 Kure Port 6,000 45	Alciii I Ici.			
29 Toba Port 13,000 13,000 13,000 14,000 120	Mie Prof			
Shiga Pref. 30	WHC I ICI.			
Say of Pref. 32 Miyazu Port 42 Agama Pref. 34 Mouth of Riv. Yamato (Sakai City) 35 Miyamac-bashi Bridge,Riv. Katsura (Kyoto City) 36 Ouside Osaka Port 37 Mouth of Riv. Yamato (Sakai City) 38 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 39 Offshore of Himeji 420	Shiga Prof			· ·
Kyoto Pref. 32 Miyazu Port 42 Kyoto City 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) 14 Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 240 Osaka City 35 Osaka Port 5,300 36 Outside Osaka Port 430 37 Mouth of Riv. Yodo (Osaka City) 450 38 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 5,300 19 Offshore of Himeji 420 Kobe City 40 Kobe Port (center) 21,000 Nara Pref. 41 Riv. Yamato (Oji Town) 14 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 30 Okayama Pref. 43 Offshore of Mizushima 55 Hiroshima Pref. 44 Kure Port 6,000 Yamaguchi Pref. 46 Tokuyama Bay 770 Yamaguchi Pref. 46 Tokuyama Bay 350 Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) 1.6 Ka	Siliga I ICI.			
Kyoto City 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) 14 Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 240 Osaka City 35 Osaka Port 430 36 Outside Osaka Port 430 37 Mouth of Riv. Yodo (Osaka City) 450 38 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 5,300 Hyogo Pref. 39 Offshore of Himeji 420 Kobe City 40 Kobe Port (center) 21,000 Nara Pref. 41 Riv. Yamato (Oji Town) 14 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 30 Okayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 30 Okayama Pref. 43 Offshore of Mizushima 55 Hiroshima Bay 770 Yamaguchi Pref. 46 Tokuyama Bay 350 Yamaguchi Pref. 46 Tokuyama Bay 350 Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) 1.6	Kyoto Pref			
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Osaka City 35 Osaka Port 5,300 36 Outside Osaka Port 430 37 Mouth of Riv. Yodo (Osaka City) 450 38 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 5,300 Hyogo Pref. 39 Offshore of Himeji 420 Kobe City 40 Kobe Port (center) 21,000 Nara Pref. 41 Riv. Yamato (Oji Town) 14 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 30 Okayama Pref. 43 Offshore of Mizushima 55 Hiroshima Pref. 44 Kure Port 6,000 Yamaguchi Pref. 45 Hiroshima Bay 770 Yamaguchi Pref. 46 Tokuyama Bay 350 47 Offshore of Ube 940 48 Offshore of Hagi 49 Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) 1.6 Kagawa Pref. 50 Takamatsu Port 45 Kochi Pref. 51 Niihama Port				
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	Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref. 59 Riv. Amori (Kirishima City) nd	Cagoshima Pref.			
60 Riv. Gotanda (Ichikikushikino City) nd				
Okinawa Pref. 61 Naha Port 5,700	Okinawa Pref.	61	Naha Port	5,700

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 54/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 54/61\ (Missing\ value: 0) \\ \end{array}$

Detection limit: 0.3 Quantification limit: 0.8

	stats
Geometric mean	11
Median	21
Maximum	1,500
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.7
	2	Tomakomai Port	31
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	14
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(0.3)
Akita Pref.	6	Lake Hachiro	7.1
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	0.9
Fukushima Pref.	8	Onahama Port	72
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.1
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	41
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(0.6)
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	41
Tokyo Wici.	14	Mouth of Riv. Sumida (Minato Ward)	230
Yokohama City	15	Yokohama Port	470
•	16		34
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	270
Niicoto Duof	18	·	1.8
Niigata Pref. Toyama Pref.	19	Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1.3
,			
Ishikawa Pref. Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	3.4
Yamanashi Pref.			tr(0.3)
	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(0.4)
Nagano Pref.	23	Lake Suwa (center)	21
Shizuoka Pref.	24	Shimizu Port	30
4:1:D C	25	Riv. Tenryu (Iwata City)	tr(0.3)
Aichi Pref.	26	Kinuura Port	16
16. D. C	27	Nagoya Port	22
Mie Pref.	28	Yokkaichi Port	100
ati n a	29	Toba Port	880
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	24
	31	Lake Biwa (center, offshore of Karasaki)	21
Kyoto Pref.	32	Miyazu Port	5.1
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1.6
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	33
Osaka City	35	Osaka Port	640
	36	Outside Osaka Port	39
	37	Mouth of Riv. Yodo (Osaka City)	56
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	420
Hyogo Pref.	39	Offshore of Himeji	49
Kobe City	40	Kobe Port (center)	1,500
Nara Pref.	41	Riv. Yamato (Oji Town)	1.8
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	11
Okayama Pref.	43	Offshore of Mizushima	7.4
Hiroshima Pref.	44	Kure Port	500
	45	Hiroshima Bay	62
Yamaguchi Pref.	46	Tokuyama Bay	26
	47	Offshore of Ube	57
	48	Offshore of Hagi	5.2
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	23
Ehime Pref.	51	Niihama Port	25
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	3.1
Kitakyushu City	53	Dokai Bay	940
Fukuoka City	54	Hakata Bay	12
Saga Pref.	55	Imari Bay	17
Nagasaki Pref.	56	Omura Bay	53
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	500
J	71	la como el est	300

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 52/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 52/61\ (Missing\ value: 0) \end{array}$

Detection limit : 0.3 Quantification limit : 0.9

	stats
Geometric mean	9.0
Median	11
Maximum	3,700
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	2.7
	2	Tomakomai Port	7.3
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	39
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	15
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	1.9
Fukushima Pref.	8	Onahama Port	1,700
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	7.7
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	71
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(0.5)
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	62
TORYO WICE.	14	Mouth of Riv. Sumida (Minato Ward)	2,400
Yokohama City	15	Yokohama Port	3,700
•	16		26
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	420
Niicoto Duof	18	· · · · · · · · · · · · · · · · · · ·	1.9
Niigata Pref.	19	Lower Riv. Shinano (Niigata City)	
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1.3
Ishikawa Pref. Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City)	2.7 nd
		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Lake Suwa (center)	tr(0.3)
Nagano Pref.	23		17
Shizuoka Pref.	24	Shimizu Port	11
4:1:D C	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	5.4
14: D C	27	Nagoya Port	11
Mie Pref.	28	Yokkaichi Port	40
ati n a	29	Toba Port	14
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	26
	31	Lake Biwa (center, offshore of Karasaki)	15
Kyoto Pref.	32	Miyazu Port	4.7
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(0.7)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	17
Osaka City	35	Osaka Port	270
	36	Outside Osaka Port	20
	37	Mouth of Riv. Yodo (Osaka City)	31
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	110
Hyogo Pref.	39	Offshore of Himeji	34
Kobe City	40	Kobe Port (center)	140
Nara Pref.	41	Riv. Yamato (Oji Town)	1.5
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	10
Okayama Pref.	43	Offshore of Mizushima	4.3
Hiroshima Pref.	44	Kure Port	700
	45	Hiroshima Bay	28
Yamaguchi Pref.	46	Tokuyama Bay	nd
	47	Offshore of Ube	11
	48	Offshore of Hagi	1.7
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	56
Ehime Pref.	51	Niihama Port	300
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	2.4
Kitakyushu City	53	Dokai Bay	3,000
Fukuoka City	54	Hakata Bay	11
Saga Pref.	55	Imari Bay	6.6
Nagasaki Pref.	56	Omura Bay	75
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)	tr(0.5)
5	60	Riv. Gotanda (Ichikikushikino City)	tr(0.3)
Okinawa Pref.	61	Naha Port	150
J	71	- :==== = ===	150

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

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

Monitored year :2018

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

Detection limit : 0.5 Quantification limit : 1.3

	stats
Geometric mean	100
Median	79
Maximum	8,900
Minimum	3.1

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	140
	2	Tomakomai Port	190
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	17
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	740
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	19
Akita Pref.	6	Lake Hachiro	77
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	65
Fukushima Pref.	8	Onahama Port	8,700
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	86
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	7.0
Chiba Pref.	11	Coast of Ichihara and Anegasaki	250
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	16
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	840
	14	Mouth of Riv. Sumida (Minato Ward)	1,700
Yokohama City	15	Yokohama Port	530
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	380
	17	Keihin Canal, Port of Kawasaki	1,800
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	130
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	43
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	73
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	15
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	31
Nagano Pref.	23	Lake Suwa (center)	780
Shizuoka Pref.	24	Shimizu Port	79
	25	Riv. Tenryu (Iwata City)	30
Aichi Pref.	26	Kinuura Port	65
	27	Nagoya Port	82
Mie Pref.	28	Yokkaichi Port	300
	29	Toba Port	92
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	180
	31	Lake Biwa (center, offshore of Karasaki)	65
Kyoto Pref.	32	Miyazu Port	20
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	37
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	880
Osaka City	35	Osaka Port	1,900
	36	Outside Osaka Port	140
	37	Mouth of Riv. Yodo (Osaka City)	310
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	270
Hyogo Pref.	39	Offshore of Himeji	570
Kobe City	40	Kobe Port (center)	210
Nara Pref.	41	Riv. Yamato (Oji Town)	23
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	140
Okayama Pref.	43	Offshore of Mizushima	38
Hiroshima Pref.	44	Kure Port	140
	45	Hiroshima Bay	60
Yamaguchi Pref.	46	Tokuyama Bay	200
g	47	Offshore of Ube	55
	48	Offshore of Hagi	13
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	29
Kagawa Pref.	50	Takamatsu Port	120
Ehime Pref.	51	Niihama Port	610
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	64
Kitakyushu City	53	Dokai Bay	8,900
Fukuoka City	54	Hakata Bay	37
Saga Pref.	55	Imari Bay	62
Nagasaki Pref.	56	Omura Bay	47
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	3.1
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	12
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	5.7
reagosimila i ici.	60	Riv. Gotanda (Ichikikushikino City)	4.5
Okinawa Pref.	61	Naha Port	79
Okinawa 1 ICI.	01	I MIN I OIL	12

⁽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.

[3] Hexachlorobenzene/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection \ Frequency \ (site): 50/61 \ (Missing \ value: 0) \\ Detection \ Frequency \ (sample): 50/61 \ (Missing \ value: 0) \\ \end{array}$

Detection limit : 0.6 Quantification limit : 1.6

	stats
Geometric mean	3.7
Median	3.8
Maximum	270
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	19
	2	Tomakomai Port	tr(1.1)
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	3.3
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	25
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	5.3
Fukushima Pref.	8	Onahama Port	5.5
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(0.8)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	3.9
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(1.5)
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	19
Tokyo Met.	14	Mouth of Riv. Sumida (Minato Ward)	38
Yokohama City	15	Yokohama Port	4.8
•	16		35
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	3.9
Miiosta Buof	18	·	14
Niigata Pref.		Lower Riv. Shinano (Niigata City)	
Toyama Pref. Ishikawa Pref.	19 20	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	4.7 7.6
Fukui Pref.	21	Mouth of Riv. Sai (Kanazawa City)	
		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Lake Suwa (center)	nd
Nagano Pref.	23		63
Shizuoka Pref.	24	Shimizu Port	2.1
A: 1: D C	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	1.9
14: D C	27	Nagoya Port	23
Mie Pref.	28	Yokkaichi Port	20
a1: p 0	29	Toba Port	3.1
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	8.6
	31	Lake Biwa (center, offshore of Karasaki)	3.0
Kyoto Pref.	32	Miyazu Port	tr(1.0)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	4.9
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	54
Osaka City	35	Osaka Port	77
	36	Outside Osaka Port	3.8
	37	Mouth of Riv. Yodo (Osaka City)	62
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	14
Hyogo Pref.	39	Offshore of Himeji	31
Kobe City	40	Kobe Port (center)	7.2
Nara Pref.	41	Riv. Yamato (Oji Town)	1.7
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(1.1)
Okayama Pref.	43	Offshore of Mizushima	tr(1.1)
Hiroshima Pref.	44	Kure Port	7.0
	45	Hiroshima Bay	4.4
Yamaguchi Pref.	46	Tokuyama Bay	tr(1.2)
	47	Offshore of Ube	2.1
	48	Offshore of Hagi	tr(0.8)
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	14
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(1.2)
Kitakyushu City	53	Dokai Bay	270
Fukuoka City	54	Hakata Bay	2
Saga Pref.	55	Imari Bay	tr(1.4)
Nagasaki Pref.	56	Omura Bay	2.3
	57	Mouth of Riv. Oita (Oita City)	nd
Oita Pref.			
Oita Pref. Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City) Riv. Amori (Kirishima City)	
	58 59 60		nd nd 3.9

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

(Note 4) nd: Not detected

(Note 5) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[4] Aldrin/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 60/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 60/61\ (Missing\ value: 0) \end{array}$

Detection limit : 0.6 Quantification limit : 1.6

	stats
Geometric mean	33
Median	33
Maximum	860
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	190
	2	Tomakomai Port	12
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	16
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	12
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	5.9
Akita Pref.	6	Lake Hachiro	51
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	27
Fukushima Pref.	8	Onahama Port	100
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	5.5
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	2.7
Chiba Pref.	11	Coast of Ichihara and Anegasaki	130
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	33
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	150
Tokyo Wict.	14	Mouth of Riv. Sumida (Minato Ward)	530
Yokohama City	15	Yokohama Port	100
•	16		230
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	140
Niicata Beaf	18	· · · · · · · · · · · · · · · · · · ·	74
Niigata Pref. Toyama Pref.	19	Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	15
,			
Ishikawa Pref. Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City)	51 2.7
		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Lake Suwa (center)	2.0
Nagano Pref.	23		130
Shizuoka Pref.	24	Shimizu Port	16
4:1:D C	25	Riv. Tenryu (Iwata City)	20
Aichi Pref.	26	Kinuura Port	29
16. D. C	27	Nagoya Port	45
Mie Pref.	28	Yokkaichi Port	200
ati n a	29	Toba Port	110
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	33
	31	Lake Biwa (center, offshore of Karasaki)	12
Kyoto Pref.	32	Miyazu Port	3.8
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	60
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	260
Osaka City	35	Osaka Port	860
	36	Outside Osaka Port	44
	37	Mouth of Riv. Yodo (Osaka City)	230
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	140
Hyogo Pref.	39	Offshore of Himeji	360
Kobe City	40	Kobe Port (center)	140
Nara Pref.	41	Riv. Yamato (Oji Town)	18
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	21
Okayama Pref.	43	Offshore of Mizushima	7.6
Hiroshima Pref.	44	Kure Port	77
	45	Hiroshima Bay	44
Yamaguchi Pref.	46	Tokuyama Bay	11
	47	Offshore of Ube	22
	48	Offshore of Hagi	15
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	3.3
Kagawa Pref.	50	Takamatsu Port	190
Ehime Pref.	51	Niihama Port	3.9
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	8.2
Kitakyushu City	53	Dokai Bay	250
Fukuoka City	54	Hakata Bay	42
Saga Pref.	55	Imari Bay	24
Nagasaki Pref.	56	Omura Bay	26
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	tr(1.4)
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	2.8
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
<i>5</i>	60	Riv. Gotanda (Ichikikushikino City)	82
Okinawa Pref.	61	Naha Port	560
J	71	In	500

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[5] Dieldrin/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 48/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 48/61\ (Missing\ value: 0) \\ \end{array}$

Detection limit : 0.9 Quantification limit : 2.4

	stats
Geometric mean	6.4
Median	5.9
Maximum	7,500
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	31
Homano	2	Tomakomai Port	13
Iwate Pref.	3	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	4.1
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	4.0
Fukushima Pref.	8	Onahama Port	35
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	4.0
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	31
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	4.2
,	13	Mouth of Riv. Arakawa (Koto Ward)	12
Tokyo Met.	14		73
V-1h		Mouth of Riv. Sumida (Minato Ward)	42
Yokohama City	15	Yokohama Port	
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	20
Nii D	17	Keihin Canal, Port of Kawasaki	48
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	12
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	5.2
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	5.5
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(1.2)
Nagano Pref.	23	Lake Suwa (center)	69
Shizuoka Pref.	24	Shimizu Port	5.2
	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	12
16. 7. 0	27	Nagoya Port	12
Mie Pref.	28	Yokkaichi Port	26
	29	Toba Port	7,500
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	11
	31	Lake Biwa (center, offshore of Karasaki)	2.5
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)	34
Osaka City	35	Osaka Port	61
	36	Outside Osaka Port	5.9
	37	Mouth of Riv. Yodo (Osaka City)	31
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	25
Hyogo Pref.	39	Offshore of Himeji	17
Kobe City	40	Kobe Port (center)	86
Nara Pref.	41	Riv. Yamato (Oji Town)	7.4
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	43	Offshore of Mizushima	2.5
Hiroshima Pref.	44	Kure Port	77
	45	Hiroshima Bay	17
Yamaguchi Pref.	46	Tokuyama Bay	4.1
	47	Offshore of Ube	3.7
	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	2.7
Kagawa Pref.	50	Takamatsu Port	8.3
Ehime Pref.	51	Niihama Port	9.2
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	4.4
Kitakyushu City	53	Dokai Bay	36
Fukuoka City	54	Hakata Bay	8
Saga Pref.	55	Imari Bay	3.0
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
9	60	Riv. Gotanda (Ichikikushikino City)	tr(2.2)
Okinawa Pref.	61	Naha Port	24
J	71	In	21

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[9] Toxaphenes /sediment (pg/g-dry)

Monitored year :2018

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

Detection limit: *30

Quantification limit: *70

	stats
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

ocal communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
•	2	Tomakomai Port	nd
Iwate Pref.	3	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	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	nd
Tokyo Wici.	14	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	15	Yokohama Port	nd
Kawasaki City	16 17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	nd
Niii		·	nd
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
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)	nd
Shizuoka Pref.	24	Shimizu Port	nd
	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	nd
	29	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.	34	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	35	Osaka Port	nd
, i	36	Outside Osaka Port	nd
•	37	Mouth of Riv. Yodo (Osaka City)	nd
•	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
Hyogo Pref.	39	Offshore of Himeji	nd
Kobe City	40	Kobe Port (center)	nd
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
	42		
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	43	Offshore of Mizushima	nd
Hiroshima Pref.	44	Kure Port	nd
7 1:5 0	45	Hiroshima Bay	nd
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	nd
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	nd
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.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	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 2) Data treated as detected means detection limit value and more.

[9-1] 2-endo,3-exo,5-endo,6-exo,8,8,10,10-octachlorobornane (Parlar-26) /sediment (pg/g-dry)

Monitored year :2018

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

Detection limit: 3 Quantification limit: 8

	stats
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
	2	Tomakomai Port	nd
Iwate Pref.	3	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	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	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	Keihin Canal, Port of Kawasaki	nd
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
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)	nd
Shizuoka Pref.	24	Shimizu Port	nd
	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	nd
	29	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.	34	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	35	Osaka Port	nd
	36	Outside Osaka Port	nd
	37	Mouth of Riv. Yodo (Osaka City)	nd
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
Hyogo Pref.	39	Offshore of Himeji	nd
Kobe City	40	Kobe Port (center)	nd
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
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	nd
	45	Hiroshima Bay	nd
Yamaguchi Pref.	46	Tokuyama Bay	nd
guom i ioi.	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	nd
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	nd
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.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
ragosinilla FICI.	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	nd
Okinawa Fici.	UI	rvana i Ort	iiu

(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.

[9-2] 2-endo,3-exo,5-endo,6-exo,8,8,9,10,10-nonachlorobornane (Parlar-50) /sediment (pg/g-dry)

Monitored year :2018

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

Detection limit : 3 Quantification limit : 8

	stats
Geometric mean	nd
Median	nd
Maximum	tr(3)
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Hokkuido	2	Tomakomai Port	nd
Iwate Pref.	3	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	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	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
Transair City	17	Keihin Canal, Port of Kawasaki	nd
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
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)	nd
Shizuoka Pref.	24	Shimizu Port	nd
Shizuoka 1 ici.	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
Alciii I Ici.	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	nd
WHE I ICI.	29	Toba Port	tr(3)
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	nd
Siliga I ICI.	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.	34	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	35	Osaka Port	nd
Озака Спу	36	Outside Osaka Port	nd
ŀ	37	Mouth of Riv. Yodo (Osaka City)	nd
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
Hyogo Pref.	39	Offshore of Himeji	nd
Kobe City	40	Kobe Port (center)	nd
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
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	nd
THOSHIIIa FICI.	45	Hiroshima Bay	nd
Yamaguchi Pref.	46	Tokuyama Bay	nd
i amagucini Fiei.	47	Offshore of Ube	1
	48	Offshore of Hagi	nd nd
Tokushima Pref.	48	Mouth of Riv. Yoshino (Tokushima City)	nd nd
	50	Takamatsu Port	
Kagawa Pref. Ehime Pref.	51		nd
		Niihama Port	nd 1
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City) Dokai Bay	nd nd
Kitakyushu City	53	·	nd
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.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
01: 2 2	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[9-3] 2,2,5,5,8,9,9,10,10-Nonachlorobornane (Parlar-62) /sediment (pg/g-dry)

Monitored year :2018

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

Detection limit : 20 Quantification limit : 50

	stats
Geometric mean	nd
Median	nd
Maximum	tr(20)
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Honaudo	2	Tomakomai Port	nd
Iwate Pref.	3	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	tr(20)
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	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	nd
I okyo wiet.	14	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	15	Yokohama Port	nd
Kawasaki City	16		nd
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	
			nd
Ishikawa Pref. Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.			nd
	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	23	Lake Suwa (center)	nd
Shizuoka Pref.	24	Shimizu Port	nd
4:1:D C	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
16: D C	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	nd
a1: p a	29	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.	34	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	35	Osaka Port	nd
	36	Outside Osaka Port	nd
	37	Mouth of Riv. Yodo (Osaka City)	nd
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
Hyogo Pref.	39	Offshore of Himeji	nd
Kobe City	40	Kobe Port (center)	nd
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
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	nd
	45	Hiroshima Bay	nd
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	nd
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	nd
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.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
<i>G</i>	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	nd
			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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

(Note 4) nd: Not detected

(Note 5) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[10] Mirex/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 44/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 44/61\ (Missing\ value: 0) \\ \end{array}$

Detection limit: 0.3 Quantification limit: 0.8

	stats
Geometric mean	1.1
Median	0.9
Maximum	240
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	0.9
110111111111111111111111111111111111111	2	Tomakomai Port	tr(0.7)
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(0.7)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	1.1
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(0.5)
Fukushima Pref.	8	Onahama Port	2.5
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	10
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(0.3)
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	7.7
,	14	Mouth of Riv. Sumida (Minato Ward)	25
Yokohama City	15	Yokohama Port	55
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	9.2
12amabana eng	17	Keihin Canal, Port of Kawasaki	20
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(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)	tr(0.5)
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)	3.9
Shizuoka Pref.	24	Shimizu Port	6.1
Silizuoka 1 ici.	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	2.7
Alcili I Ici.	27	Nagoya Port	1.1
Mie Pref.	28	Yokkaichi Port	2.1
whe i ici.	29	Toba Port	1.7
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	3.0
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	1.2
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)	4.5
Osaka City	35	Osaka Port	30
Озака Спу	36	Outside Osaka Port	2.3
	37	Mouth of Riv. Yodo (Osaka City)	5.0
ŀ	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	3.6
Hyogo Pref.	39	Offshore of Himeji	4.1
Kobe City	40	Kobe Port (center)	8.7
Nara Pref.	41	Riv. Yamato (Oji Town)	tr(0.5)
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	240
THOSHIII FICE.	45	Hiroshima Bay	3.6
Yamaguchi Pref.	46	Tokuyama Bay	tr(0.6)
i amagucini Frei.	47	Offshore of Ube	tr(0.3)
•	48	Offshore of Hagi	
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd nd
	50	Takamatsu Port	6.3
Kagawa Pref. Ehime Pref.	51		
		Niihama Port Mouth of Riv. Shimanto (Shimanto City)	1.7
Kochi Pref.	52		tr(0.7)
Kitakyushu City	53	Dokai Bay	8.2
Fukuoka City	54	Hakata Bay	tr(0.6)
Saga Pref.	55	Imari Bay	tr(0.4)
Nagasaki Pref.	56	Omura Bay	1.0
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
01: 70.0	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	2.3

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[14] Polybromodiphenyl ethers(Br4~Br10)/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 58/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 58/61\ (Missing\ value: 0) \\ \end{array}$

Detection limit: *30

Quantification limit: *87

	stats
Geometric mean	6,000
Median	7,500
Maximum	580,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	3,400
	2	Tomakomai Port	2,000
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	10,000
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	330
Akita Pref.	6	Lake Hachiro	1,800
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	240
Fukushima Pref.	8	Onahama Port	40,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	8,200
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	110
Chiba Pref.	11	Coast of Ichihara and Anegasaki	37,000
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	11,000
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	170,000
ĺ	14	Mouth of Riv. Sumida (Minato Ward)	260,000
Yokohama City	15	Yokohama Port	31,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	64,000
	17	Keihin Canal, Port of Kawasaki	61,000
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	4,300
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	2,800
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	58,000
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	260
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Shoho (1 Sutuga City)	1,800
Nagano Pref.	23	Lake Suwa (center)	15,000
Shizuoka Pref.	24	Shimizu Port	1,900
Silizuoka 1 ici.	25	Riv. Tenryu (Iwata City)	200
Aichi Pref.	26	Kinuura Port	29,000
Alciii I Ici.	27	Nagoya Port	170,000
Mie Pref.	28	Yokkaichi Port	80,000
WHE I ICI.	29	Toba Port	4,600
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	17,000
Siliga Fici.	31	Lake Biwa (center, offshore of Karasaki)	9,400
Kyoto Pref.	32	Miyazu Port	810
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	4,400
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	68,000
Osaka Fier. Osaka City	35	Osaka Port	580,000
Osaka City	36	Outside Osaka Port	5,200
	37	Mouth of Riv. Yodo (Osaka City)	150,000
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	34,000
Hyogo Pref.	39	Offshore of Himeji	110,000
, ,	40	Kobe Port (center)	25,000
Kobe City Nara Pref.	41	Riv. Yamato (Oii Town)	·
	42	Kiv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	4,600
Wakayama Pref.	43		9,700 2,200
Okayama Pref. Hiroshima Pref.		Offshore of Mizushima	
Hirosnima Prei.	44	Kure Port	41,000
Vomagu-1: DC	45	Hiroshima Bay	73,000
Yamaguchi Pref.	46	Tokuyama Bay	240,000
	47	Offshore of Ube	7,500
T-11: D C	48	Offshore of Hagi	680
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	68,000
Ehime Pref.	51	Niihama Port	1,400
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	2,100
Kitakyushu City	53	Dokai Bay	140,000
Fukuoka City	54	Hakata Bay	6,800
Saga Pref.	55	Imari Bay	3,300
Nagasaki Pref.	56	Omura Bay	1,700
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	110
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	tr(31)
	60	Riv. Gotanda (Ichikikushikino City)	260
Okinawa Pref.	61	Naha Port	45,000

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 43/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 43/61\ (Missing\ value: 0) \end{array}$

Detection limit : 6 Quantification limit : 18

	stats
Geometric mean	21
Median	tr(16)
Maximum	3,100
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	27
	2	Tomakomai Port	170
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(14)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	tr(11)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	310
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(6)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	86
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	19
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	200
,	14	Mouth of Riv. Sumida (Minato Ward)	310
Yokohama City	15	Yokohama Port	63
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	200
Tan asam Say	17	Keihin Canal, Port of Kawasaki	3,100
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(14)
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(6)
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	tr(14)
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	34
Nagano Pref.	23	Lake Suwa (center)	53
Shizuoka Pref.	24	Shimizu Port	tr(12)
Silizuoka i iei.	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	tr(15)
Alciii i ici.	27	Nagoya Port	47
Mie Pref.	28	Yokkaichi Port	39
WHE I ICI.	29	Toba Port	tr(10)
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	99
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	83
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)	590
Osaka City	35	Osaka Port	410
Osaka City	36	Outside Osaka Port	30
	37	Mouth of Riv. Yodo (Osaka City)	860
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	26
Hyogo Pref.	39	Offshore of Himeji	110
Kobe City	40	Kobe Port (center)	46
Nara Pref.	41	Riv. Yamato (Oji Town)	tr(16)
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	43	Offshore of Mizushima	tr(6)
Hiroshima Pref.	44	Kure Port	29
THOSHIHA FICE.	45	Hiroshima Bay	23
Yamaguchi Pref.	46	Tokuyama Bay	110
i amaguciii Fiei.	47	Offshore of Ube	
	48	Offshore of Hagi	tr(14)
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd nd
	50	Takamatsu Port	nd 28
Kagawa Pref. Ehime Pref.	51		
		Niihama Port Mouth of Riv. Shimanto (Shimanto City)	nd
Kochi Pref. Kitakyushu City	52	Dokai Bay	nd 200
, ,	53		
Fukuoka City	54	Hakata Bay	33
Saga Pref.	55	Imari Bay	tr(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
Okinawa Pref.	60	Riv. Gotanda (Ichikikushikino City)	nd
	61	Naha Port	75

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 38/61\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 38/61\ (Missing\ value: 0)$

Detection limit : 6 Quantification limit : 18

	stats
Geometric mean	tr(13)
Median	tr(11)
Maximum	1,800
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	23
	2	Tomakomai Port	97
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(10)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	tr(6)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	190
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	48
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(12)
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	71
	14	Mouth of Riv. Sumida (Minato Ward)	120
Yokohama City	15	Yokohama Port	38
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	110
	17	Keihin Canal, Port of Kawasaki	1,800
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(11)
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	tr(7)
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(17)
Nagano Pref.	23	Lake Suwa (center)	24
Shizuoka Pref.	24	Shimizu Port	tr(8)
	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	tr(8)
	27	Nagoya Port	tr(15)
Mie Pref.	28	Yokkaichi Port	tr(14)
	29	Toba Port	tr(7)
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	45
	31	Lake Biwa (center, offshore of Karasaki)	42
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)	300
Osaka City	35	Osaka Port	130
	36	Outside Osaka Port	tr(15)
	37	Mouth of Riv. Yodo (Osaka City)	550
-	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	tr(13)
Hyogo Pref.	39	Offshore of Himeji	51
Kobe City	40	Kobe Port (center)	20
Nara Pref.	41	Riv. Yamato (Oji Town)	tr(12)
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	tr(16)
	45	Hiroshima Bay	tr(8)
Yamaguchi Pref.	46	Tokuyama Bay	25
	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	tr(15)
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	86
Fukuoka City	54	Hakata Bay	24
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
ragosinilla r ici.	60	Riv. Amori (Kirishina City) Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	39
	O1	prana rom	37

(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.

(Note 3) tr : detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 53/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 53/61\ (Missing\ value: 0) \end{array}$

Detection limit : 2 Quantification limit : 4

	stats
Geometric mean	19
Median	24
Maximum	2,800
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	24
	2	Tomakomai Port	93
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	21
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	9
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(3)
Fukushima Pref.	8	Onahama Port	320
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	6
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	4
Chiba Pref.	11	Coast of Ichihara and Anegasaki	60
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	25
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	420
1011/01/11011	14	Mouth of Riv. Sumida (Minato Ward)	370
Yokohama City	15	Yokohama Port	69
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	310
rawasaki City	17	Keihin Canal, Port of Kawasaki	2,800
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	9
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	4
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	32
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(3)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	22
Nagano Pref.	23	Lake Suwa (center)	52
Shizuoka Pref.	24	Shimizu Port	7
Silizuoka i ici.	25	Riv. Tenryu (Iwata City)	tr(2)
Aichi Pref.	26	Kinuura Port	35
Alciii I Ici.	27	Nagoya Port	190
Mie Pref.	28	Yokkaichi Port	100
WHE I ICI.	29	Toba Port	12
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	85
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	60
Kyoto Pref.	32	Miyazu Port	tr(2)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(3)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	560
Osaka City	35	Osaka Port	340
Osaka City	36	Outside Osaka Port	27
	37	Mouth of Riv. Yodo (Osaka City)	860
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	41
Hyogo Pref.	39	Offshore of Himeji	130
Kobe City	40	Kobe Port (center)	37
Nara Pref.	41	Riv. Yamato (Oji Town)	14
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
		())/	7
Okayama Pref. Hiroshima Pref.	43	Offshore of Mizushima Kure Port	40
mosmina Prei.	44		40
Vomograhi Desf	45	Hiroshima Bay	
Yamaguchi Pref.	46	Tokuyama Bay	320
-		Offshore of Ube	11
Toloughier - Du-C	48	Offshore of Hagi Mouth of Pir. Vechina (Talayshina City)	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50		20
Ehima Df	50	Takamatsu Port	38
Ehime Pref.	51	Niihama Port	tr(2)
Kochi Pref.	51 52	Niihama Port Mouth of Riv. Shimanto (Shimanto City)	tr(2) tr(2)
Kochi Pref. Kitakyushu City	51 52 53	Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay	tr(2) tr(2) 160
Kochi Pref. Kitakyushu City Fukuoka City	51 52 53 54	Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay	tr(2) tr(2) 160 31
Kochi Pref. Kitakyushu City Fukuoka City Saga Pref.	51 52 53 54 55	Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay	tr(2) tr(2) 160 31
Kochi Pref. Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref.	51 52 53 54 55 56	Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay Omura Bay	tr(2) tr(2) 160 31 5 tr(2)
Kochi Pref. Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref.	51 52 53 54 55 56 57	Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay Omura Bay Mouth of Riv. Oita (Oita City)	tr(2) tr(2) 160 31 5 tr(2) tr(2)
Kochi Pref. Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref. Miyazaki Pref.	51 52 53 54 55 56 57 58	Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay Omura Bay Mouth of Riv. Oita (Oita City) Mouth of Riv. Oyodo (Miyazaki City)	tr(2) tr(2) 160 31 5 tr(2) tr(2)
Kochi Pref. Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref.	51 52 53 54 55 56 57 58 59	Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay Omura Bay Mouth of Riv. Oita (Oita City) Mouth of Riv. Oyodo (Miyazaki City) Riv. Amori (Kirishima City)	tr(2) tr(2) 160 31 5 tr(2) tr(2) tr(2) nd nd
Kochi Pref. Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref. Miyazaki Pref.	51 52 53 54 55 56 57 58	Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay Omura Bay Mouth of Riv. Oita (Oita City) Mouth of Riv. Oyodo (Miyazaki City)	tr(2) tr(2) 160 31 5 tr(2) tr(2)

(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.

(Note 3) tr : detection limit value and more, less than Quantification limit value.

(Note 4) nd: Not detected

(Note 5) *: indicates the sum value of the Quantification [Detection] limits of each congener.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 45/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 45/61\ (Missing\ value: 0) \end{array}$

Detection limit : 2 Quantification limit : 6

	stats
Geometric mean	8
Median	7
Maximum	1,700
Minimum	nd

Local communities Hokkaido	No	Monitored sites	measured value
Ţ	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	14
	2	Tomakomai Port	50
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	9
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	200
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(2)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(3)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	25
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	15
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	61
Tonyo Mau	14	Mouth of Riv. Sumida (Minato Ward)	100
Yokohama City	15	Yokohama Port	27
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	160
rawasan eny	17	Keihin Canal, Port of Kawasaki	1,700
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	6
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(2)
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	tr(4)
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(2)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	13
Nagano Pref.	23	Lake Suwa (center)	19
Shizuoka Pref.	24	Shimizu Port	tr(3)
Silizuoka i ici.	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	7
Alcili I Ici.	27	Nagoya Port	14
Mie Pref.	28	Yokkaichi Port	16
WHE FIEL.	29	Toba Port	tr(5)
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	35
Siliga Fiel.	31	Lake Biwa (center, offshore of Karasaki)	28
Kyoto Pref.	32	Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(2)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	220
	35	Osaka Port	100
Osaka City	36	Outside Osaka Port	14
-			
-	37	Mouth of Riv. Yodo (Osaka City)	490
Harana Dane	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	7
Hyogo Pref.	39	Offshore of Himeji	43
Kobe City	40	Kobe Port (center)	15
Nara Pref.	41	Riv. Yamato (Oji Town)	9
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	43	Offshore of Mizushima	tr(3)
Hiroshima Pref.	44	Kure Port	14
	45	Hiroshima Bay	6
Yamaguchi Pref.	46	Tokuyama Bay	14
_	47	Offshore of Ube	tr(2)
	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	13
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	54
Fukuoka City	54	Hakata Bay	17
	55	Imari Bay	nd
Saga Pref.	56	Omura Bay	nd
Nagasaki Pref.		Mouth of Riv. Oita (Oita City)	nd
Nagasaki Pref. Oita Pref.	57		
Nagasaki Pref. Oita Pref. Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Nagasaki Pref. Oita Pref.	58 59	Mouth of Riv. Oyodo (Miyazaki City) Riv. Amori (Kirishima City)	nd nd
Nagasaki Pref. Oita Pref. Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	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 2) Data treated as detected means detection limit value and more.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 52/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 52/61\ (Missing\ value: 0) \end{array}$

Detection limit: 1 Quantification limit: 3

	stats
Geometric mean	29
Median	37
Maximum	1,300
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	23
	2	Tomakomai Port	34
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	58
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	21
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(2)
Fukushima Pref.	8	Onahama Port	380
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	22
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(1)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	160
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	16
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	1,300
TOKYO IVICI.	14	Mouth of Riv. Sumida (Minato Ward)	930
Yokohama City	15	Yokohama Port	190
•	16		390
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	730
Niicata Duaf	18	,	5
Niigata Pref.	19	Lower Riv. Shinano (Niigata City)	
Toyama Pref. Ishikawa Pref.	20	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(2)
Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	· · · · · · · · · · · · · · · · · · ·
			nd 4
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	
Nagano Pref.	23	Lake Suwa (center)	130
Shizuoka Pref.	24	Shimizu Port	18
4:1:D C	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	170
14: D C	27	Nagoya Port	870
Mie Pref.	28	Yokkaichi Port	570
a1: P 0	29	Toba Port	71
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	110
	31	Lake Biwa (center, offshore of Karasaki)	75
Kyoto Pref.	32	Miyazu Port	3
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	3
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	1,200
Osaka City	35	Osaka Port	930
	36	Outside Osaka Port	37
	37	Mouth of Riv. Yodo (Osaka City)	620
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	150
Hyogo Pref.	39	Offshore of Himeji	270
Kobe City	40	Kobe Port (center)	100
Nara Pref.	41	Riv. Yamato (Oji Town)	14
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(2)
Okayama Pref.	43	Offshore of Mizushima	31
Hiroshima Pref.	44	Kure Port	110
	45	Hiroshima Bay	250
Yamaguchi Pref.	46	Tokuyama Bay	1,200
	47	Offshore of Ube	54
	48	Offshore of Hagi	3
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	120
Ehime Pref.	51	Niihama Port	5
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	11
Kitakyushu City	53	Dokai Bay	390
Fukuoka City	54	Hakata Bay	49
Saga Pref.	55	Imari Bay	23
Nagasaki Pref.	56	Omura Bay	13
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	290

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[14-3-1] 2,2',4,4',5,5'-Pentabromodiphenyl ether (#153)/sediment (pg/g-dry)

Monitored year :2018

 $\label{eq:def:Detection} Detection\ Frequency\ (site): 49/61\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 49/61\ (Missing\ value: 0)$

Detection limit: 1 Quantification limit: 3

	stats
Geometric mean	5
Median	6
Maximum	340
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(2)
	2	Tomakomai Port	14
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	4
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(1)
Fukushima Pref.	8	Onahama Port	69
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(1)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(1)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	13
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	6
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	47
,	14	Mouth of Riv. Sumida (Minato Ward)	55
Yokohama City	15	Yokohama Port	18
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	66
•	17	Keihin Canal, Port of Kawasaki	340
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(2)
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(1)
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	4
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(2)
Nagano Pref.	23	Lake Suwa (center)	12
Shizuoka Pref.	24	Shimizu Port	tr(1)
	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	6
1110111 1 1011	27	Nagoya Port	9
Mie Pref.	28	Yokkaichi Port	50
1110 1 1011	29	Toba Port	12
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	19
	31	Lake Biwa (center, offshore of Karasaki)	12
Kyoto Pref.	32	Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(1)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	160
Osaka City	35	Osaka Port	120
	36	Outside Osaka Port	8
	37	Mouth of Riv. Yodo (Osaka City)	190
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	6
Hyogo Pref.	39	Offshore of Himeji	24
Kobe City	40	Kobe Port (center)	9
Nara Pref.	41	Riv. Yamato (Oji Town)	6
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	43	Offshore of Mizushima	19
Hiroshima Pref.	44	Kure Port	6
1111 OSHIII II 101.	45	Hiroshima Bay	5
Yamaguchi Pref.	46	Tokuyama Bay	11
I dilluguelli I Iel.	47	Offshore of Ube	12
	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	6
Ehime Pref.	51	Niihama Port	tr(1)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(1)
Kitakyushu City	53	Dokai Bay	29
Fukuoka City	54	Hakata Bay	9
Saga Pref.	55	Imari Bay	tr(1)
Nagasaki Pref.	56	Omura Bay	tr(1)
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	nd
	58	Mouth of Riv. Oyodo (Miyazaki City)	
Miyazaki Pref.			nd nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City) Riv. Gotanda (Ichikikushikino City)	nd
Olrinov- Df	60	37	nd
Okinawa Pref.	61	Naha Port	22

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 49/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 49/61\ (Missing\ value: 0) \end{array}$

Detection limit: 0.8 Quantification limit: 2.1

	stats
Geometric mean	5.0
Median	6.2
Maximum	110
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	3.1
11011111110	2	Tomakomai Port	5.8
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	6.9
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	5.8
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(0.8)
Fukushima Pref.	8	Onahama Port	54
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.4
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	14
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	2.7
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	94
Tokyo Wiet.	14	Mouth of Riv. Sumida (Minato Ward)	70
Yokohama City	15	Yokohama Port	16
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	39
Kawasaki City	17	Keihin Canal, Port of Kawasaki	100
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(2.0)
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(1.0)
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	9.8
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	9.8 nd
Yamanashi Pref.	22		
Nagano Pref.	23	Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Lake Suwa (center)	tr(1.1)
Shizuoka Pref.			2.8
Snizuoka Prei.	24	Shimizu Port Pire Tompy (Ivoto City)	
Aichi Pref.	25	Riv. Tenryu (Iwata City)	nd
Aichi Prei.	26	Kinuura Port	9.2
Mi- Du-£	27	Nagoya Port	
Mie Pref.	28	Yokkaichi Port	36
CI. D. C	29	Toba Port	6.2
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	25
T . D C	31	Lake Biwa (center, offshore of Karasaki)	10
Kyoto Pref.	32	Miyazu Port	tr(1.5)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	110
Osaka City	35	Osaka Port	52
	36	Outside Osaka Port	6.6
	37	Mouth of Riv. Yodo (Osaka City)	76
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	11
Hyogo Pref.	39	Offshore of Himeji	27
Kobe City	40	Kobe Port (center)	9.0
Nara Pref.	41	Riv. Yamato (Oji Town)	3.2
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	43	Offshore of Mizushima	tr(1.5)
Hiroshima Pref.	44	Kure Port	8.8
	45	Hiroshima Bay	30
Yamaguchi Pref.	46	Tokuyama Bay	95
	47	Offshore of Ube	11
	48	Offshore of Hagi	tr(1.0)
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	11
Ehime Pref.	51	Niihama Port	tr(1.2)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(1.3)
Kitakyushu City	53	Dokai Bay	34
Fukuoka City	54	Hakata Bay	6
Saga Pref.	55	Imari Bay	4.3
Nagasaki Pref.	56	Omura Bay	tr(1.6)
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	27

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 46/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 46/61\ (Missing\ value: 0) \end{array}$

Detection limit : 5 Quantification limit : 14

	stats
Geometric mean	44
Median	48
Maximum	1,900
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	29
Homaido	2	Tomakomai Port	19
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	93
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	29
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	440
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	33
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	130
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	19
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	1,900
Tokyo Wict.	14	Mouth of Riv. Sumida (Minato Ward)	1,000
Yokohama City	15	Yokohama Port	210
•	16		310
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	230
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(10)
	19		. ,
Toyama Pref. Ishikawa Pref.	20	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(6)
Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City) Michima bachi Pridga Piy, Shana (Tauruga City)	· · · · · · · · · · · · · · · · · · ·
		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Lake Suwa (center)	tr(7) 150
Nagano Pref.	23		
Shizuoka Pref.	24	Shimizu Port	tr(10)
4:1:D C	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	240
14: D C	27	Nagoya Port	810
Mie Pref.	28	Yokkaichi Port	950
al: D 0	29	Toba Port	120
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	88
	31	Lake Biwa (center, offshore of Karasaki)	130
Kyoto Pref.	32	Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(12)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	1,200
Osaka City	35	Osaka Port	1,200
	36	Outside Osaka Port	61
	37	Mouth of Riv. Yodo (Osaka City)	980
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	200
Hyogo Pref.	39	Offshore of Himeji	450
Kobe City	40	Kobe Port (center)	140
Nara Pref.	41	Riv. Yamato (Oji Town)	25
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	43	Offshore of Mizushima	21
Hiroshima Pref.	44	Kure Port	180
	45	Hiroshima Bay	310
Yamaguchi Pref.	46	Tokuyama Bay	1,600
	47	Offshore of Ube	110
	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	190
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	14
Kitakyushu City	53	Dokai Bay	590
Fukuoka City	54	Hakata Bay	48
Saga Pref.	55	Imari Bay	27
Nagasaki Pref.	56	Omura Bay	16
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
<i>G</i>	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	300
- m 1 101.	71	ls ::::::: = ::::	500

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[14-4-1] 2,2',3,3',4,5',6'-Pentabromodiphenyl ether (#175)/sediment (pg/g-dry) [14-4-2] 2,2',3,4,4',5',6'-Pentabromodiphenyl ether (#183)/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 42/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 42/61\ (Missing\ value: 0) \\ \end{array}$

Detection limit : 5 Quantification limit : 14

	stats
Geometric mean	22
Median	15
Maximum	770
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(13)
	2	Tomakomai Port	tr(7)
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	33
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	tr(13)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	200
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(13)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	75
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(11)
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	770
	14	Mouth of Riv. Sumida (Minato Ward)	450
Yokohama City	15	Yokohama Port	120
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	110
	17	Keihin Canal, Port of Kawasaki	95
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(5)
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	77
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)	79
Shizuoka Pref.	24	Shimizu Port	nd
	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	95
	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	450
	29	Toba Port	75
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	60
	31	Lake Biwa (center, offshore of Karasaki)	53
Kyoto Pref.	32	Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(5)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	490
Osaka City	35	Osaka Port	530
	36	Outside Osaka Port	29
	37	Mouth of Riv. Yodo (Osaka City)	390
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	150
Hyogo Pref.	39	Offshore of Himeji	180
Kobe City	40	Kobe Port (center)	77
Nara Pref.	41	Riv. Yamato (Oji Town)	15
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	43	Offshore of Mizushima	tr(8)
Hiroshima Pref.	44	Kure Port	61
V 1' B C	45	Hiroshima Bay	87 520
Yamaguchi Pref.	46	Tokuyama Bay	520
	47 48	Offshore of Ube	110
Tolaushima Dasf	48	Offshore of Hagi Mouth of Piv Vechina (Takushima City)	nd nd
Tokushima Pref.	50	Mouth of Riv. Yoshino (Tokushima City)	nd 68
Kagawa Pref. Ehime Pref.	51	Takamatsu Port Niihama Port	68
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd tr(6)
Kitakyushu City	53	Dokai Bay	310
Fukuoka City	54	Hakata Bay	18
Saga Pref.	55	Imari Bay	tr(9)
Nagasaki Pref.	56	Omura Bay	tr(9)
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyado (Miyazaki City)	
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd nd
Kagosiiina Pref.		Riv. Amori (Kırısnıma Cıty) Riv. Gotanda (Ichikikushikino City)	nd
Okinovia Deaf	60		nd
Okinawa Pref.	61	Naha Port	120

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection \ Frequency \ (site): 57/61 \ (Missing \ value: 0) \\ Detection \ Frequency \ (sample): 57/61 \ (Missing \ value: 0) \\ \end{array}$

Detection limit: 0.5 Quantification limit: 1.2

	stats
Geometric mean	100
Median	140
Maximum	5,500
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	97
	2	Tomakomai Port	59
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	360
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	7.2
Akita Pref.	6	Lake Hachiro	110
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	12
Fukushima Pref.	8	Onahama Port	1,500
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	100
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	3.5
Chiba Pref.	11	Coast of Ichihara and Anegasaki	260
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	88
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	5,500
TORYO WICE.	14	Mouth of Riv. Sumida (Minato Ward)	1,600
Yokohama City	15	Yokohama Port	660
•	16		840
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	700
Niicoto Duof	18	· · · · · · · · · · · · · · · · · · ·	42
Niigata Pref.		Lower Riv. Shinano (Niigata City)	
Toyama Pref. Ishikawa Pref.	19 20	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City)	29 660
Fukui Pref.	20		
		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	3.9
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	28
Nagano Pref.	23	Lake Suwa (center)	300
Shizuoka Pref.	24	Shimizu Port	30
4:1:D C	25	Riv. Tenryu (Iwata City)	4.9
Aichi Pref.	26	Kinuura Port	670
14: D C	27	Nagoya Port	3,800
Mie Pref.	28	Yokkaichi Port	2,100
al: D 0	29	Toba Port	140
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	260
	31	Lake Biwa (center, offshore of Karasaki)	330
Kyoto Pref.	32	Miyazu Port	16
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	32
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	3,100
Osaka City	35	Osaka Port	2,800
	36	Outside Osaka Port	180
	37	Mouth of Riv. Yodo (Osaka City)	3,100
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	810
Hyogo Pref.	39	Offshore of Himeji	1,600
Kobe City	40	Kobe Port (center)	380
Nara Pref.	41	Riv. Yamato (Oji Town)	41
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	23
Okayama Pref.	43	Offshore of Mizushima	84
Hiroshima Pref.	44	Kure Port	570
	45	Hiroshima Bay	850
Yamaguchi Pref.	46	Tokuyama Bay	4,000
	47	Offshore of Ube	180
	48	Offshore of Hagi	20
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(0.5)
Kagawa Pref.	50	Takamatsu Port	700
Ehime Pref.	51	Niihama Port	22
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	37
Kitakyushu City	53	Dokai Bay	1,900
Fukuoka City	54	Hakata Bay	140
Saga Pref.	55	Imari Bay	64
Nagasaki Pref.	56	Omura Bay	42
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
5	60	Riv. Gotanda (Ichikikushikino City)	1.6
Okinawa Pref.	61	Naha Port	850
>11111au 1 101.	71	In	050

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 60/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 60/61\ (Missing\ value: 0) \end{array}$

Detection limit : 2 Quantification limit : 5

	stats
Geometric mean	690
Median	770
Maximum	56,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	450
-	2	Tomakomai Port	270
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	tr(4)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	1,800
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	40
Akita Pref.	6	Lake Hachiro	370
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	42
Fukushima Pref.	8	Onahama Port	6,600
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	660
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	15
Chiba Pref.	11	Coast of Ichihara and Anegasaki	4,000
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	940
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	25,000
ĺ	14	Mouth of Riv. Sumida (Minato Ward)	31,000
Yokohama City	15	Yokohama Port	3,100
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	5,000
	17	Keihin Canal, Port of Kawasaki	4,400
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	390
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	290
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	5,500
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	35
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	190
Nagano Pref.	23	Lake Suwa (center)	1,600
Shizuoka Pref.	24	Shimizu Port	200
Silizuoka 1 ici.	25	Riv. Tenryu (Iwata City)	27
Aichi Pref.	26	Kinuura Port	3,600
Alciii I Ici.	27	Nagoya Port	22,000
Mie Pref.	28	Yokkaichi Port	10,000
WHE I ICI.	29	Toba Port	660
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	2,000
Siliga Fici.	31	Lake Biwa (center, offshore of Karasaki)	1,400
Kyoto Pref.	32	Miyazu Port	1,400
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	500
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	15,000
Osaka Fier. Osaka City	35	Osaka Port	56,000
Osaka City	36	Outside Osaka Port	590
-	37	Mouth of Riv. Yodo (Osaka City)	12,000
-	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	3,900
Hyogo Pref.	39	Offshore of Himeji	9,900
	40	Kobe Port (center)	2,500
Kobe City Nara Pref.	41	Riv. Yamato (Oii Town)	390
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	770 370
Okayama Pref.	43	Offshore of Mizushima	
Hiroshima Pref.	44	Kure Port	3,100
Vomagu-1: DC	45	Hiroshima Bay	6,900
Yamaguchi Pref.	46	Tokuyama Bay	33,000
<u> </u>	47	Offshore of Use	880
T-11: P C	48	Offshore of Hagi	100
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	6,100
Ehime Pref.	51	Niihama Port	140
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	220
Kitakyushu City	53	Dokai Bay	11,000
Fukuoka City	54	Hakata Bay	820
Saga Pref.	55	Imari Bay	340
Nagasaki Pref.	56	Omura Bay	210
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	10
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	tr(2)
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	5
	60	Riv. Gotanda (Ichikikushikino City)	28
Okinawa Pref.	61	Naha Port	4,900

⁽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).

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

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

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

Detection limit: 14 Quantification limit: 42

	stats
Geometric mean	5,100
Median	6,300
Maximum	520,000
Minimum	tr(14)

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	2,700
	2	Tomakomai Port	1,400
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	tr(18)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	7,800
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	280
Akita Pref.	6	Lake Hachiro	1,300
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	180
Fukushima Pref.	8	Onahama Port	30,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	7,400
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	87
Chiba Pref.	11	Coast of Ichihara and Anegasaki	32,000
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	9,800
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	140,000
1011/01/101	14	Mouth of Riv. Sumida (Minato Ward)	220,000
Yokohama City	15	Yokohama Port	27,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	57,000
reawasan eny	17	Keihin Canal, Port of Kawasaki	49,000
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	3,800
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	2,500
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	51,000
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	220
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	1,500
Nagano Pref.	23	Lake Suwa (center)	13,000
Shizuoka Pref.	24	Shimizu Port	1,600
Silizuoka 1 ici.	25	Riv. Tenryu (Iwata City)	170
Aichi Pref.	26	Kinuura Port	24,000
Alcili I Ici.	27	Nagoya Port	140,000
Mie Pref.	28	Yokkaichi Port	66,000
When I let.	29	Toba Port	3,600
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	14,000
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	7,300
Kyoto Pref.	32	Miyazu Port	690
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	3,900
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	46,000
Osaka City	35	Osaka Port	520,000
Osaka City	36	Outside Osaka Port	4,300
	37	Mouth of Riv. Yodo (Osaka City)	130,000
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	29,000
Hyogo Pref.	39	Offshore of Himeji	100,000
Kobe City	40	Kobe Port (center)	22,000
Nara Pref.	41	Riv. Yamato (Oji Town)	4,100
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	8,900
Okayama Pref.	43	Offshore of Mizushima	1,700
Hiroshima Pref.	43	Kure Port	37,000
niiosiiiiia riei.	45		65,000
V	46	Hiroshima Bay	
Yamaguchi Pref.		Tokuyama Bay	200,000
	47	Offshore of Ube	6,300
T 1 1' D C	48	Offshore of Hagi	560
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(20)
Kagawa Pref.	50	Takamatsu Port	61,000
Ehime Pref.	51	Niihama Port	1,200
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	1,800
Kitakyushu City	53	Dokai Bay	130,000
Fukuoka City	54	Hakata Bay	5,700
Saga Pref.	55	Imari Bay	2,800
Nagasaki Pref.	56	Omura Bay	1,400
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	100
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	tr(14)
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	tr(26)
	60	Riv. Gotanda (Ichikikushikino City)	230
Okinawa Pref.	61	Naha Port	38,000

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

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

⁽Note 4) *: indicates the sum value of the Quantification [Detection] limits of each congener.

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 55/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 55/61\ (Missing\ value: 0) \end{array}$

Detection limit : 3 Quantification limit : 7

	stats
Geometric mean	43
Median	57
Maximum	700
Minimum	nd

Local communities	measured value 99 110 tr(4) 60 35 54
2 Tomakomai Port Iwate Pref. 3 Riv. Toyosawa (Hanamaki City) Miyagi Pref. 4 Sendai Bay (Matsushima Bay) Sendai City 5 Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Akita Pref. 6 Lake Hachiro Yamagata Pref. 7 Mouth of Riv. Mogami (Sakata City) Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki	tr(4) 60 35 54
Iwate Pref. 3 Riv. Toyosawa (Hanamaki City) Miyagi Pref. 4 Sendai Bay (Matsushima Bay) Sendai City 5 Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Akita Pref. 6 Lake Hachiro Yamagata Pref. 7 Mouth of Riv. Mogami (Sakata City) Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki	tr(4) 60 35 54
Miyagi Pref. 4 Sendai Bay (Matsushima Bay) Sendai City 5 Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Akita Pref. 6 Lake Hachiro Yamagata Pref. 7 Mouth of Riv. Mogami (Sakata City) Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki	60 35 54
Sendai City 5 Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Akita Pref. 6 Lake Hachiro Yamagata Pref. 7 Mouth of Riv. Mogami (Sakata City) Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki	35 54
Akita Pref. 6 Lake Hachiro Yamagata Pref. 7 Mouth of Riv. Mogami (Sakata City) Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki	54
Yamagata Pref. 7 Mouth of Riv. Mogami (Sakata City) Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki	
Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki	24
Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki	nd
Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki	16
Chiba Pref. 11 Coast of Ichihara and Anegasaki	42
	320
	27
Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward)	160
14 Mouth of Riv. Sumida (Minato Ward)	700
Yokohama City 15 Yokohama Port	200
Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City)	230
17 Keihin Canal, Port of Kawasaki	200
Niigata Pref. 18 Lower Riv. Shinano (Niigata City)	64
Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	7
Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City)	22
Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	31
Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	43
Nagano Pref. 23 Lake Suwa (center)	170
Shizuoka Pref. 24 Shimizu Port	14
25 Riv. Tenryu (Iwata City)	21
Aichi Pref. 26 Kinuura Port	99
27 Nagoya Port	91
Mie Pref. 28 Yokkaichi Port	65
29 Toba Port	49
Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira)	340
31 Lake Biwa (center, offshore of Karasaki)	190
Kyoto Pref. 32 Miyazu Port	10
Kyoto City 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	39
Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City)	190
Osaka City 35 Osaka Port	150
36 Outside Osaka Port	100
37 Mouth of Riv. Yodo (Osaka City)	300
38 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	57
Hyogo Pref. 39 Offshore of Himeji	160
Kobe City 40 Kobe Port (center)	94
Nara Pref. 41 Riv. Yamato (Oji Town)	130
Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref. 43 Offshore of Mizushima	44
Hiroshima Pref. 44 Kure Port	90
45 Hiroshima Bay	95
Yamaguchi Pref. 46 Tokuyama Bay	130
47 Offshore of Ube	30
48 Offshore of Hagi	nd
Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref. 50 Takamatsu Port	57
Ehime Pref. 51 Niihama Port	29
Kochi Pref. 52 Mouth of Riv. Shimanto (Shimanto City)	13
Kitakyushu City 53 Dokai Bay	51
Fukuoka City 54 Hakata Bay	64
Saga Pref. 55 Imari Bay	29
Nagasaki Pref. 56 Omura Bay	260
Oita Pref. 57 Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City)	8
Kagoshima Pref. 59 Riv. Amori (Kirishima City)	nd
	31
60 Riv. Gotanda (Ichikikushikino City)	

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

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

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

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 58/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 58/61\ (Missing\ value: 0) \\ \end{array}$

Detection limit : 4 Quantification limit : 9

	stats
Geometric mean	23
Median	25
Maximum	190
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	32
	2	Tomakomai Port	45
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	12
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	26
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	21
Akita Pref.	6	Lake Hachiro	25
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(8)
Fukushima Pref.	8	Onahama Port	14
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	10
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(7)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	85
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	13
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	29
1011/01/101	14	Mouth of Riv. Sumida (Minato Ward)	48
Yokohama City	15	Yokohama Port	25
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	26
rawasaki city	17	Keihin Canal, Port of Kawasaki	52
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	10
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	19
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	41
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	19
Nagano Pref.	23	Lake Suwa (center)	22
Shizuoka Pref.	24	Shimizu Port	18
Silizuoka 1 ici.	25	Riv. Tenryu (Iwata City)	10
Aichi Pref.	26	Kinuura Port	12
Alcili I Ici.	27	Nagoya Port	15
Mie Pref.	28	Yokkaichi Port	16
ivite i ici.	29	Toba Port	17
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	110
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	83
Kyoto Pref.	32	Miyazu Port	54
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	26
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	55
Osaka City	35	Osaka Port	120
Osaka City	36	Outside Osaka Port	44
ŀ	37	Mouth of Riv. Yodo (Osaka City)	150
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	37
Hyogo Pref.	39	Offshore of Himeji	63
Kobe City	40	Kobe Port (center)	38
Nara Pref.	41	Riv. Yamato (Oji Town)	140
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(6)
Okayama Pref.	43	Offshore of Mizushima	35
Hiroshima Pref.	44	Kure Port	12
musilina Pref.	44		27
Vamaguahi Duaf	45	Hiroshima Bay	28
Yamaguchi Pref.	46	Tokuyama Bay	
	47	Offshore of Ube	12 39
Tolaushima Duaf		Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	
Tokushima Pref.	49		nd
Kagawa Pref.	50	Takamatsu Port	17
Ehime Pref. Kochi Pref.	51	Niihama Port Mouth of Bir. Shimonto (Shimonto City)	19
	52	Mouth of Riv. Shimanto (Shimanto City)	12
Kitakyushu City	53	Dokai Bay	47
Fukuoka City	54	Hakata Bay	37
Saga Pref.	55	Imari Bay	52
Nagasaki Pref.	56	Omura Bay	190
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	tr(5)
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	25
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
01: 7.0	60	Riv. Gotanda (Ichikikushikino City)	tr(7)
Okinawa Pref.	61	Naha Port	11

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

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

Detection limit: 0.3 Quantification limit: 0.9

	stats
Geometric mean	72
Median	77
Maximum	3,400
Minimum	1.2

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	180
	2	Tomakomai Port	170
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	22
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	180
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	4.0
Akita Pref.	6	Lake Hachiro	68
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	48
Fukushima Pref.	8	Onahama Port	3,400
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	80
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	5.4
Chiba Pref.	11	Coast of Ichihara and Anegasaki	170
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	11
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	860
,	14	Mouth of Riv. Sumida (Minato Ward)	960
Yokohama City	15	Yokohama Port	250
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	220
124454111 0109	17	Keihin Canal, Port of Kawasaki	900
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	150
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	32
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	77
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	20
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	20
Nagano Pref.	23	Lake Suwa (center)	950
Shizuoka Pref.	24	Shimizu Port	53
Sinzuoka i ici.	25	Riv. Tenryu (Iwata City)	27
Aichi Pref.	26	Kinuura Port	57
Alcili I Ici.	27	Nagoya Port	76
Mie Pref.	28	Yokkaichi Port	220
WHE I ICI.	29	Toba Port	91
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	190
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	81
Kyoto Pref.	32	Miyazu Port	13
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	53
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	190
Osaka City	35	Osaka Port	710
Osaka City	36	Outside Osaka Port	110
ŀ	37	Mouth of Riv. Yodo (Osaka City)	240
ŀ	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	160
Hyogo Pref.	39	Offshore of Himeji	1,300
Kobe City	40	Kobe Port (center)	180
Nara Pref.	41	Riv. Yamato (Oji Town)	16
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	45
Okayama Pref.	43	Offshore of Mizushima	27
Hiroshima Pref.	44	Kure Port	130
Tillosiillia Fici.	45	Hiroshima Bay	63
Yamaguchi Pref.	46	Tokuyama Bay	99
i amagucini riei.	47	Offshore of Ube	38
	48	Offshore of Hagi	7.6
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	15
	50	Takamatsu Port	110
Kagawa Pref. Ehime Pref.	51		
Kochi Pref.		Niihama Port Mouth of Bir. Shimonto (Shimonto City)	200
Kitakyushu City	52	Mouth of Riv. Shimanto (Shimanto City) Dokai Bay	46
	53		2,000
Fukuoka City	54	Hakata Bay	30
Saga Pref.	55	Imari Bay	44
Nagasaki Pref.	56	Omura Bay	44
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	1.2
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	8.0
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	2.3
01: 7.0	60	Riv. Gotanda (Ichikikushikino City)	3.0
Okinawa Pref.	61	Naha Port	85

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[18] Endosulfans /sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection \ Frequency \ (site): 12/61 \ (Missing \ value: 0) \\ Detection \ Frequency \ (sample): 12/61 \ (Missing \ value: 0) \\ \end{array}$

Detection limit: *4

Quantification limit: *10

	stats
Geometric mean	nd
Median	nd
Maximum	70
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	61
-	2	Tomakomai Port	nd
Iwate Pref.	3	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	14
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(9)
Fukushima Pref.	8	Onahama Port	nd
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(6)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	nd
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(4)
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	13
ĺ	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	Keihin Canal, Port of Kawasaki	nd
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
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)	nd
Shizuoka Pref.	24	Shimizu Port	nd
SHIZUOKA I ICI.	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
Alciii Fiei.	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	tr(4)
Mile Fiel.	29	Toba Port	nd
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	
Siliga Frei.		,	tr(5)
Vt- Df	31	Lake Biwa (center, offshore of Karasaki) Miyazu Port	nd 1
Kyoto Pref.		7	nd 1
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	70
Osaka City	35	Osaka Port	nd
-	36	Outside Osaka Port	nd
-	37	Mouth of Riv. Yodo (Osaka City)	nd
II D C	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
Hyogo Pref.	39	Offshore of Himeji	tr(8)
Kobe City	40	Kobe Port (center)	nd
Nara Pref.	41	Riv. Yamato (Oji Town)	tr(5)
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	nd
77 110 0	45	Hiroshima Bay	nd
Yamaguchi Pref.	46	Tokuyama Bay	nd
<u> </u>	47	Offshore of Ube	nd
m	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	tr(8)
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	nd
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.	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	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[18-1] α -Endosulfan/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 21/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 21/61\ (Missing\ value: 0) \end{array}$

Detection limit : 2 Quantification limit : 5

	stats
Geometric mean	nd
Median	nd
Maximum	30
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	20
	2	Tomakomai Port	nd
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(2)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	9
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(4)
Fukushima Pref.	8	Onahama Port	nd
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(3)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	nd
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(2)
Tokyo Met.	13	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	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(2)
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(2)
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(2)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(3)
Nagano Pref.	23	Lake Suwa (center)	nd
Shizuoka Pref.	24	Shimizu Port	nd
	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	tr(2)
	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	tr(4)
	29	Toba Port	tr(3)
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	5
	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.	34	Mouth of Riv. Yamato (Sakai City)	30
Osaka City	35	Osaka Port	nd
	36	Outside Osaka Port	nd
	37	Mouth of Riv. Yodo (Osaka City)	nd
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
Hyogo Pref.	39	Offshore of Himeji	6
Kobe City	40	Kobe Port (center)	nd
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(2)
Okayama Pref.	43	Offshore of Mizushima	nd
Hiroshima Pref.	44	Kure Port	nd
	45	Hiroshima Bay	nd
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	8
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(3)
Kitakyushu City	53	Dokai Bay	nd
Fukuoka City	54	Hakata Bay	tr(3)
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)	tr(2)
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[18-2] β- Endosulfan/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 11/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 11/61\ (Missing\ value: 0) \end{array}$

Detection limit : 2 Quantification limit : 5

	stats
Geometric mean	nd
Median	nd
Maximum	41
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	41
TTOKKLIGO	2	Tomakomai Port	nd
Iwate Pref.	3	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	5
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	5
Fukushima Pref.	8	Onahama Port	nd
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(3)
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	nd
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(2)
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	13
,	14	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	15	Yokohama Port	nd
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	nd
Tan mount only	17	Keihin Canal, Port of Kawasaki	nd
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
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Shoho (Tsutuga City)	nd
Nagano Pref.	23	Lake Suwa (center)	tr(2)
Shizuoka Pref.	24	Shimizu Port	nd
Silizuoka i iei.	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
Alciii I Ici.	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	nd
WHE I ICI.	29	Toba Port	nd
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	nd
Singa i ici.	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.	34	Mouth of Riv. Yamato (Sakai City)	40
Osaka City	35	Osaka Port	nd
Озака Спу	36	Outside Osaka Port	nd
	37	Mouth of Riv. Yodo (Osaka City)	tr(3)
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
Hyogo Pref.	39	Offshore of Himeji	tr(2)
Kobe City	40	Kobe Port (center)	nd
Nara Pref.	41	Riv. Yamato (Oji Town)	5
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	nd
Thioshina Fiel.	45	Hiroshima Bay	nd
Yamaguchi Pref.	46	Tokuyama Bay	nd
i amaguciii r ici.	47	Offshore of Ube	-
	48	Offshore of Hagi	nd nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	nd
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	nd
Fukuoka City	54	Hakata Bay	nd
Saga Pref.	55	Imari Bay	nd
U		Omura Bay	
Nagasaki Pref.	56 57	Mouth of Riv. Oita (Oita City)	nd nd
Oita Pref.			nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City) Riv. Gotanda (Ichikikushikino City)	nd
Okinovya Deaf	60		nd nd
Okinawa Pref.	61	Naha Port	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[20] Total Polychlorinated Naphthalenes/sediment (pg/g-dry)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 61/61\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 61/61\ (Missing\ value: 0)$

Detection limit: *3.2

Quantification limit: *8.5

	stats
Geometric mean	680
Median	810
Maximum	34,000
Minimum	9.9

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	460
	2	Tomakomai Port	320
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	100
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	740
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	180
Akita Pref.	6	Lake Hachiro	420
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	170
Fukushima Pref.	8	Onahama Port	3,300
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	180
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	65
Chiba Pref.	11	Coast of Ichihara and Anegasaki	2,300
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	98
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	3,800
	14	Mouth of Riv. Sumida (Minato Ward)	18,000
Yokohama City	15	Yokohama Port	34,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	5,700
	17	Keihin Canal, Port of Kawasaki	29,000
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	330
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	210
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	1,200
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	47
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	120
Nagano Pref.	23	Lake Suwa (center)	2,500
Shizuoka Pref.	24	Shimizu Port	670
	25	Riv. Tenryu (Iwata City)	77
Aichi Pref.	26	Kinuura Port	740
	27	Nagoya Port	820
Mie Pref.	28	Yokkaichi Port	1,600
	29	Toba Port	2,900
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	970
	31	Lake Biwa (center, offshore of Karasaki)	580
Kyoto Pref.	32	Miyazu Port	1,500
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1,300
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	2,600
Osaka City	35	Osaka Port	12,000
	36	Outside Osaka Port	840
	37	Mouth of Riv. Yodo (Osaka City)	4,100
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	3,400
Hyogo Pref.	39	Offshore of Himeji	3,600
Kobe City	40	Kobe Port (center)	7,700
Nara Pref.	41	Riv. Yamato (Oji Town)	280
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	490
Okayama Pref.	43	Offshore of Mizushima	210
Hiroshima Pref.	44	Kure Port	5,600
	45	Hiroshima Bay	1,400
Yamaguchi Pref.	46	Tokuyama Bay	380
	47	Offshore of Ube	850
	48	Offshore of Hagi	110
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	87
Kagawa Pref.	50	Takamatsu Port	2,000
Ehime Pref.	51	Niihama Port	230
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	220
Kitakyushu City	53	Dokai Bay	7,900
Fukuoka City	54	Hakata Bay	950
Saga Pref.	55	Imari Bay	1,100
Nagasaki Pref.	56	Omura Bay	810
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	11
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	27
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	9.9
- Lagoomma 1 101.	60	Riv. Gotanda (Ichikikushikino City)	20
Okinawa Pref.	61	Naha Port	3,600
Okmawa 1 ici.	01	2 (MAAN 2 OC)	5,000

⁽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.

[20-1] Monochloronaphthalenes/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 60/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 60/61\ (Missing\ value: 0) \end{array}$

Detection limit: 1 Quantification limit: 3

	stats
Geometric mean	62
Median	78
Maximum	4,500
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	71
	2	Tomakomai Port	58
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	54
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(2)
Akita Pref.	6	Lake Hachiro	36
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	4
Fukushima Pref.	8	Onahama Port	220
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	11
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(2)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	220
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	11
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	370
TORYO WICE.	14	Mouth of Riv. Alakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward)	1,300
Yokohama City	15	Yokohama Port	4,500
•	16		310
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	3,000
Niicoto Duof	18	· · · · · · · · · · · · · · · · · · ·	14
Niigata Pref.	19	Lower Riv. Shinano (Niigata City)	
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	30
Ishikawa Pref. Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	86 8
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	5
Nagano Pref.	23	Lake Suwa (center)	120
Shizuoka Pref.	24	Shimizu Port	44
4:1:D C	25	Riv. Tenryu (Iwata City)	5
Aichi Pref.	26	Kinuura Port	87
14: D C	27	Nagoya Port	150
Mie Pref.	28	Yokkaichi Port	210
al: D 0	29	Toba Port	240
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	90
	31	Lake Biwa (center, offshore of Karasaki)	63
Kyoto Pref.	32	Miyazu Port	420
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	180
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	230
Osaka City	35	Osaka Port	2,100
	36	Outside Osaka Port	78
	37	Mouth of Riv. Yodo (Osaka City)	400
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	800
Hyogo Pref.	39	Offshore of Himeji	380
Kobe City	40	Kobe Port (center)	350
Nara Pref.	41	Riv. Yamato (Oji Town)	10
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	51
Okayama Pref.	43	Offshore of Mizushima	45
Hiroshima Pref.	44	Kure Port	360
	45	Hiroshima Bay	120
Yamaguchi Pref.	46	Tokuyama Bay	86
	47	Offshore of Ube	64
	48	Offshore of Hagi	13
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	9
Kagawa Pref.	50	Takamatsu Port	360
Ehime Pref.	51	Niihama Port	34
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	50
Kitakyushu City	53	Dokai Bay	580
Fukuoka City	54	Hakata Bay	72
Saga Pref.	55	Imari Bay	120
Nagasaki Pref.	56	Omura Bay	110
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	tr(1)
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	5
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	tr(1)
5	60	Riv. Gotanda (Ichikikushikino City)	tr(2)
Okinawa Pref.	61	Naha Port	490
Januaria I ICI.	01	1. mm 2. 040	770

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[20-2] Dichloronaphthalenes/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 60/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 60/61\ (Missing\ value: 0) \end{array}$

Detection limit : 0.4 Quantification limit : 1.1

	stats
Geometric mean	68
Median	71
Maximum	9,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	40
	2	Tomakomai Port	54
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	1.7
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	71
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	2.9
Akita Pref.	6	Lake Hachiro	44
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	6.3
Fukushima Pref.	8	Onahama Port	310
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	19
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	3.8
Chiba Pref.	11	Coast of Ichihara and Anegasaki	320
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	11
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	660
,	14	Mouth of Riv. Sumida (Minato Ward)	3,100
Yokohama City	15	Yokohama Port	9,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	760
	17	Keihin Canal, Port of Kawasaki	8,500
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	21
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	22
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	130
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	3.3
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	3.1
Nagano Pref.	23	Lake Suwa (center)	250
Shizuoka Pref.	24	Shimizu Port	45
Sinzuoka 1 iei.	25	Riv. Tenryu (Iwata City)	8.8
Aichi Pref.	26	Kinuura Port	99
Atlenii i ici.	27	Nagoya Port	130
Mie Pref.	28	Yokkaichi Port	170
when then	29	Toba Port	480
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	94
Siliga i ici.	31	Lake Biwa (center, offshore of Karasaki)	50
Kyoto Pref.	32	Miyazu Port	700
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	210
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	220
Osaka City	35	Osaka Port	1,400
Osaka City	36	Outside Osaka Port	88
	37	Mouth of Riv. Yodo (Osaka City)	390
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	400
Hyogo Pref.	39	Offshore of Himeji	450
Kobe City	40	Kobe Port (center)	690
Nara Pref.	41	Riv. Yamato (Oji Town)	8.7
		() /	47
Wakayama Pref. Okayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima	31
Hiroshima Pref.	43	Kure Port	660
minosinina Pref.			
Vamaguch: Deaf	45 46	Hiroshima Bay	180 69
Yamaguchi Pref.	46	Tokuyama Bay Offshore of Ube	71
Tokushima Pref.	48	Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	20
			10
Kagawa Pref.	50	Takamatsu Port	240
Ehime Pref. Kochi Pref.	51	Niihama Port Mouth of Bir. Shimonto (Shimonto City)	31
	52	Mouth of Riv. Shimanto (Shimanto City)	23
Kitakyushu City	53	Dokai Bay	580
Fukuoka City	54	Hakata Bay	68
Saga Pref.	55	Imari Bay	110
Nagasaki Pref.	56	Omura Bay	120
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	tr(0.8)
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	2.9
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	tr(0.8)
01: 7.0	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	700

(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.

(Note 3) tr : detection limit value and more, less than Quantification limit value.

(Note 4) nd: Not detected

(Note 5) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[20-3] Trichloronaphthalenes/sediment (pg/g-dry)

Monitored year :2018

$$\label{eq:definition} \begin{split} & Detection \ Frequency \ (site): 61/61 \ (Missing \ value: 0) \\ & Detection \ Frequency \ (sample): 61/61 \ (Missing \ value: 0) \end{split}$$

Detection limit: 0.3 Quantification limit: 0.8

	stats
Geometric mean	120
Median	140
Maximum	7,500
Minimum	1.0

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	77
	2	Tomakomai Port	56
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	17
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	130
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	16
Akita Pref.	6	Lake Hachiro	85
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	24
Fukushima Pref.	8	Onahama Port	640
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	29
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	14
Chiba Pref.	11	Coast of Ichihara and Anegasaki	460
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	10
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	700
1011/01/1011	14	Mouth of Riv. Sumida (Minato Ward)	4,700
Yokohama City	15	Yokohama Port	7,500
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	920
Tan asam Say	17	Keihin Canal, Port of Kawasaki	6,300
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	58
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	39
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	320
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	7.7
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	10
Nagano Pref.	23	Lake Suwa (center)	480
Shizuoka Pref.	24	Shimizu Port	120
Silizuoka i iei.	25	Riv. Tenryu (Iwata City)	13
Aichi Pref.	26	Kinuura Port	170
Alciii I Ici.	27	Nagoya Port	160
Mie Pref.	28	Yokkaichi Port	200
WHE I ICI.	29	Toba Port	810
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	150
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	92
Kyoto Pref.	32	Miyazu Port	140
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	290
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	400
Osaka City	35	Osaka Port	2,700
Osuku City	36	Outside Osaka Port	130
	37	Mouth of Riv. Yodo (Osaka City)	490
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	580
Hyogo Pref.	39	Offshore of Himeji	630
Kobe City	40	Kobe Port (center)	2,000
Nara Pref.	41	Riv. Yamato (Oji Town)	35
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	79
Okayama Pref.	43	Offshore of Mizushima	33
Hiroshima Pref.	44	Kure Port	1,500
THOSHINA TICI.	45	Hiroshima Bay	310
Yamaguchi Pref.	46	Tokuyama Bay	62
r umagaem r rei.	47	Offshore of Ube	200
	48	Offshore of Hagi	21
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	20
Kagawa Pref.	50	Takamatsu Port	280
Ehime Pref.	51	Niihama Port	35
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	32
Kitakyushu City	53	Dokai Bay	1,400
Fukuoka City	54	Hakata Bay	180
Saga Pref.	55	Imari Bay	220
Nagasaki Pref.	56	Omura Bay	180
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	1.7
Miyazaki Pref.	58	Mouth of Riv. Oyado (Miyazaki City)	5.7
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	1.1
Kagosiiilia Fiel.	60	Riv. Gotanda (Ichikikushikino City)	1.1
Okinawa Pref.	61	Naha Port	520
Okiliawa Prei.	01	Ivalia i Oit	320

⁽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.

[20-4] Tetrachloronaphthalenes/sediment (pg/g-dry)

Monitored year :2018

$$\label{eq:definition} \begin{split} & Detection \ Frequency \ (site): 61/61 \ (Missing \ value: 0) \\ & Detection \ Frequency \ (sample): 61/61 \ (Missing \ value: 0) \end{split}$$

Detection limit : 0.3 Quantification limit : 0.7

	stats
Geometric mean	230
Median	240
Maximum	5,700
Minimum	4.8

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	160
	2	Tomakomai Port	82
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	57
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	230
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	88
Akita Pref.	6	Lake Hachiro	150
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	78
Fukushima Pref.	8	Onahama Port	1,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	54
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	29
Chiba Pref.	11	Coast of Ichihara and Anegasaki	680
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	36
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	1,100
, i	14	Mouth of Riv. Sumida (Minato Ward)	5,600
Yokohama City	15	Yokohama Port	4,900
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	2,100
Í	17	Keihin Canal, Port of Kawasaki	5,700
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	150
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	69
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	420
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	18
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	52
Nagano Pref.	23	Lake Suwa (center)	1,000
Shizuoka Pref.	24	Shimizu Port	270
	25	Riv. Tenryu (Iwata City)	33
Aichi Pref.	26	Kinuura Port	240
	27	Nagoya Port	240
Mie Pref.	28	Yokkaichi Port	410
11110 1 1011	29	Toba Port	1,000
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	360
Singu i ici.	31	Lake Biwa (center, offshore of Karasaki)	200
Kyoto Pref.	32	Miyazu Port	140
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	420
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	1,100
Osaka City	35	Osaka Port	3,600
Obulia City	36	Outside Osaka Port	310
•	37	Mouth of Riv. Yodo (Osaka City)	1,400
•	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	890
Hyogo Pref.	39	Offshore of Himeji	1,300
Kobe City	40	Kobe Port (center)	2,800
Nara Pref.	41	Riv. Yamato (Oji Town)	150
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	200
Okayama Pref.	43	Offshore of Mizushima	60
Hiroshima Pref.	44	Kure Port	1,900
mosimila fici.	45	Hiroshima Bay	500
Yamaguchi Pref.	46	Tokuyama Bay	82
ı amagucılı Fiel.	47	Offshore of Ube	330
-	48	Offshore of Hagi	330
Tokushima Pref.	48	Mouth of Riv. Yoshino (Tokushima City)	34
	50	Takamatsu Port	690
Kagawa Pref. Ehime Pref.	51		
		Niihama Port Mouth of Riv. Shimanto (Shimanto City)	63 74
Kochi Pref. Kitakyushu City	52	Dokai Bay	
, ,	53	,	2,400
Fukuoka City	54	Hakata Bay	390
Saga Pref.	55	Imari Bay	400
Nagasaki Pref.	56	Omura Bay	260
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	4.8
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	10
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	4.8
	60	Riv. Gotanda (Ichikikushikino City)	11
Okinawa Pref.	61	Naha Port	1,100

⁽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.

[20-5] Pentachloronaphthalenes/sediment (pg/g-dry)

Monitored year :2018

$$\label{eq:definition} \begin{split} & Detection \ Frequency \ (site): 61/61 \ (Missing \ value: 0) \\ & Detection \ Frequency \ (sample): 61/61 \ (Missing \ value: 0) \end{split}$$

Detection limit : 0.4 Quantification limit : 1.0

	stats
Geometric mean	120
Median	130
Maximum	4,600
Minimum	2.2

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	92
	2	Tomakomai Port	46
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	23
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	180
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	65
Akita Pref.	6	Lake Hachiro	82
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	50
Fukushima Pref.	8	Onahama Port	630
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	34
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	14
Chiba Pref.	11	Coast of Ichihara and Anegasaki	380
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	24
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	640
Tokyo Wict.	14	Mouth of Riv. Sumida (Minato Ward)	2,500
Yokohama City	15	Yokohama Port	4,600
	16		1,300
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	2,100
Niicoto Duof	18	· · · · · · · · · · · · · · · · · · ·	67
Niigata Pref. Toyama Pref.	19	Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	35
-			
Ishikawa Pref. Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City)	210 7.9
		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	43
Nagano Pref.	23	Lake Suwa (center)	530
Shizuoka Pref.	24	Shimizu Port	150
4:1:D C	25	Riv. Tenryu (Iwata City)	14
Aichi Pref.	26	Kinuura Port	120
14: D C	27	Nagoya Port	110
Mie Pref.	28	Yokkaichi Port	300
ati B a	29	Toba Port	310
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	200
	31	Lake Biwa (center, offshore of Karasaki)	130
Kyoto Pref.	32	Miyazu Port	61
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	160
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	570
Osaka City	35	Osaka Port	1,800
	36	Outside Osaka Port	180
	37	Mouth of Riv. Yodo (Osaka City)	1,200
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	490
Hyogo Pref.	39	Offshore of Himeji	700
Kobe City	40	Kobe Port (center)	1,300
Nara Pref.	41	Riv. Yamato (Oji Town)	70
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	98
Okayama Pref.	43	Offshore of Mizushima	29
Hiroshima Pref.	44	Kure Port	880
	45	Hiroshima Bay	250
Yamaguchi Pref.	46	Tokuyama Bay	52
	47	Offshore of Ube	140
	48	Offshore of Hagi	15
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	12
Kagawa Pref.	50	Takamatsu Port	400
Ehime Pref.	51	Niihama Port	31
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	37
Kitakyushu City	53	Dokai Bay	1,500
Fukuoka City	54	Hakata Bay	190
Saga Pref.	55	Imari Bay	210
Nagasaki Pref.	56	Omura Bay	110
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	2.3
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	3.7
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	2.2
5	60	Riv. Gotanda (Ichikikushikino City)	5.4
Okinawa Pref.	61	Naha Port	640
Okmana 1 ICI.	01	I rain 2 644	070

⁽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.

[20-6] Hexachloronaphthalenes/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 58/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 58/61\ (Missing\ value: 0) \end{array}$

Detection limit : 0.3 Quantification limit : 0.7

	stats
Geometric mean	26
Median	29
Maximum	2,500
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	13
1101111111111	2	Tomakomai Port	12
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	3.0
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	61
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	9.7
Akita Pref.	6	Lake Hachiro	19
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	8.3
Fukushima Pref.	8	Onahama Port	290
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	23
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	1.9
Chiba Pref.	11	Coast of Ichihara and Anegasaki	150
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	5.1
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	260
1011,011101	14	Mouth of Riv. Sumida (Minato Ward)	630
Yokohama City	15	Yokohama Port	2,300
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	290
Tan asam Say	17	Keihin Canal, Port of Kawasaki	2,500
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	13
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	11
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	34
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.4
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	7.0
Nagano Pref.	23	Lake Suwa (center)	94
Shizuoka Pref.	24	Shimizu Port	31
Silizuoka i ici.	25	Riv. Tenryu (Iwata City)	2.6
Aichi Pref.	26	Kinuura Port	24
Alcili I ICI.	27	Nagoya Port	29
Mie Pref.	28	Yokkaichi Port	230
WHE I ICI.	29	Toba Port	53
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	57
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	36
Kyoto Pref.	32	Miyazu Port	12
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	22
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	100
Osaka City	35	Osaka Port	520
Osuku City	36	Outside Osaka Port	39
	37	Mouth of Riv. Yodo (Osaka City)	160
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	160
Hyogo Pref.	39	Offshore of Himeji	120
Kobe City	40	Kobe Port (center)	380
Nara Pref.	41	Riv. Yamato (Oji Town)	8.8
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	17
Okayama Pref.	43	Offshore of Mizushima	7.0
Hiroshima Pref.	44	Kure Port	240
THOSHINA TICE.	45	Hiroshima Bay	45
Yamaguchi Pref.	46	Tokuyama Bay	22
r umagaem r rei.	47	Offshore of Ube	29
	48	Offshore of Hagi	2.4
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	1.7
Kagawa Pref.	50	Takamatsu Port	55
Ehime Pref.	51	Niihama Port	12
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	7.0
Kitakyushu City	53	Dokai Bay	950
Fukuoka City	54	Hakata Bay	40
Saga Pref.	55	Imari Bay	43
Nagasaki Pref.	56	Omura Bay	25
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oydo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
ragosimia i ici.	60	Riv. Gotanda (Ichikikushikino City)	tr(0.3)
Okinawa Pref.	61	Naha Port	150
Okiliawa Fici.	UI	Ivalia I Oit	130

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[20-7] Heptachloronaphthalenes/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 55/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 55/61\ (Missing\ value: 0) \end{array}$

Detection limit: 0.2 Quantification limit: 0.5

	stats
Geometric mean	5.3
Median	6.0
Maximum	800
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.9
	2	Tomakomai Port	5.4
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	tr(0.3)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	15
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	0.5
Akita Pref.	6	Lake Hachiro	5.2
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	1.2
Fukushima Pref.	8	Onahama Port	130
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	7.8
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	36
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	0.6
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	68
	14	Mouth of Riv. Sumida (Minato Ward)	130
Yokohama City	15	Yokohama Port	540
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	53
·	17	Keihin Canal, Port of Kawasaki	800
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	1.8
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	4.8
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	4.0
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.3)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	0.7
Nagano Pref.	23	Lake Suwa (center)	12
Shizuoka Pref.	24	Shimizu Port	5.6
	25	Riv. Tenryu (Iwata City)	tr(0.4)
Aichi Pref.	26	Kinuura Port	2.6
	27	Nagoya Port	5.0
Mie Pref.	28	Yokkaichi Port	100
	29	Toba Port	12
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	14
8	31	Lake Biwa (center, offshore of Karasaki)	6.9
Kyoto Pref.	32	Miyazu Port	2.1
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	2.8
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	17
Osaka City	35	Osaka Port	69
osana ony	36	Outside Osaka Port	9.0
	37	Mouth of Riv. Yodo (Osaka City)	24
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	34
Hyogo Pref.	39	Offshore of Himeji	19
Kobe City	40	Kobe Port (center)	130
Nara Pref.	41	Riv. Yamato (Oji Town)	0.8
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1.3
Okayama Pref.	43	Offshore of Mizushima	2.6
Hiroshima Pref.	44	Kure Port	68
mosimia fici.	45	Hiroshima Bay	8.0
Yamaguchi Pref.	46	Tokuyama Bay	8.2
ı amagucili Fici.		- 224	
	47	Offshore of Use	8.4
Tokushima Pref.	48	Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	0.6
		Takamatsu Port	nd 6.0
Kagawa Pref.	50		6.0
Ehime Pref.	51	Niihama Port Mouth of Bir. Shimonto (Shimonto City)	10
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	1.0
Kitakyushu City	53	Dokai Bay	370
Fukuoka City	54	Hakata Bay	8
Saga Pref.	55	Imari Bay	9.0
Nagasaki Pref.	56	Omura Bay	3.9
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	14

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[20-8] Octachloronaphthalenes/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 45/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 45/61\ (Missing\ value: 0) \end{array}$

Detection limit: 0.3 Quantification limit: 0.7

	stats
Geometric mean	1.7
Median	1.7
Maximum	230
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.2
	2	Tomakomai Port	1.8
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
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	2.0
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(0.6)
Fukushima Pref.	8	Onahama Port	51
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1.6
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11	Coast of Ichihara and Anegasaki	17
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	8.4
	14	Mouth of Riv. Sumida (Minato Ward)	23
Yokohama City	15	Yokohama Port	230
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	9.1
	17	Keihin Canal, Port of Kawasaki	150
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	0.7
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1.9
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	1.2
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)	2.4
Shizuoka Pref.	24	Shimizu Port	1.7
	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	tr(0.6)
	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	17
	29	Toba Port	7.2
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	3.0
	31	Lake Biwa (center, offshore of Karasaki)	1.1
Kyoto Pref.	32	Miyazu Port	tr(0.6)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(0.6)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	3.6
Osaka City	35	Osaka Port	12
	36	Outside Osaka Port	3.1
	37	Mouth of Riv. Yodo (Osaka City)	4.4
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	11
Hyogo Pref.	39	Offshore of Himeji	4.1
Kobe City	40	Kobe Port (center)	81
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(0.3)
Okayama Pref.	43	Offshore of Mizushima	1.3
Hiroshima Pref.	44	Kure Port	28
	45	Hiroshima Bay	2.3
Yamaguchi Pref.	46	Tokuyama Bay	3.2
	47	Offshore of Ube	6.0
	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	1.2
Ehime Pref.	51	Niihama Port	16
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	100
Fukuoka City	54	Hakata Bay	2
Saga Pref.	55	Imari Bay	1.1
Nagasaki Pref.	56	Omura Bay	1.3
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
		Naha Port	2.0

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[22] Pentachlorophenol and its salts and esters/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 59/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 59/61\ (Missing\ value: 0) \end{array}$

Detection limit: *15 Quantification limit: *45

	stats
Geometric mean	280
Median	330
Maximum	4,000
Minimum	nd

ocal communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1,700
	2	Tomakomai Port	140
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	65
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	330
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(28)
Akita Pref.	6	Lake Hachiro	760
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	240
Fukushima Pref.	8	Onahama Port	1,400
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	110
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	86
Chiba Pref.	11	Coast of Ichihara and Anegasaki	3,100
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	75
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	1,800
	14	Mouth of Riv. Sumida (Minato Ward)	2,300
Yokohama City	15	Yokohama Port	950
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	350
	17	Keihin Canal, Port of Kawasaki	1,200
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	320
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	88
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	94
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	52
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	59
Nagano Pref.	23	Lake Suwa (center)	1,900
Shizuoka Pref.	24	Shimizu Port	150
ľ	25	Riv. Tenryu (Iwata City)	140
Aichi Pref.	26	Kinuura Port	1,000
ľ	27	Nagoya Port	700
Mie Pref.	28	Yokkaichi Port	1,500
ľ	29	Toba Port	1,700
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	590
Š	31	Lake Biwa (center, offshore of Karasaki)	320
Kyoto Pref.	32	Miyazu Port	85
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	120
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	930
Osaka City	35	Osaka Port	4,000
osana ony	36	Outside Osaka Port	380
	37	Mouth of Riv. Yodo (Osaka City)	1,900
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	1,200
Hyogo Pref.	39	Offshore of Himeji	1,500
Kobe City	40	Kobe Port (center)	1,200
Nara Pref.	41	Riv. Yamato (Oji Town)	150
Vakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	350
Okavama Pref.	43	Offshore of Mizushima	110
Hiroshima Pref.	44	Kure Port	430
Thoshina Fiel.	45	Hiroshima Bay	530
/amaguchi Pref.	46	Tokuyama Bay	130
amaguem Fier.			
ŀ	47	Offshore of Use	63
Tokushima Pref.	48	Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	tr(33)
			tr(26) 470
Kagawa Pref.	50	Takamatsu Port	
Ehime Pref.	51	Niihama Port	tr(25)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	390
Kitakyushu City	53	Dokai Bay	940
Fukuoka City	54	Hakata Bay	110
Saga Pref.	55	Imari Bay	1,800
	56	Omura Bay	240
Nagasaki Pref.		Mouth of Riv. Oita (Oita City)	nd
Nagasaki Pref. Oita Pref.	57		
Nagasaki Pref. Oita Pref. Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	190
Nagasaki Pref.			190 nd tr(29)

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[22-1] Pentachlorophenol/sediment (pg/g-dry)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 59/61\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 59/61\ (Missing\ value: 0)$

Detection limit : 6 Quantification limit : 18

	stats
Geometric mean	220
Median	300
Maximum	3,900
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1,500
	2	Tomakomai Port	120
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	33
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	320
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(8)
Akita Pref.	6	Lake Hachiro	730
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	200
Fukushima Pref.	8	Onahama Port	1,300
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	74
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	63
Chiba Pref.	11	Coast of Ichihara and Anegasaki	3,100
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	44
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	1,800
	14	Mouth of Riv. Sumida (Minato Ward)	2,200
Yokohama City	15	Yokohama Port	920
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	290
	17	Keihin Canal, Port of Kawasaki	1,200
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	300
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	72
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	79
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	23
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	35
Nagano Pref.	23	Lake Suwa (center)	1,800
Shizuoka Pref.	24	Shimizu Port	110
	25	Riv. Tenryu (Iwata City)	61
Aichi Pref.	26	Kinuura Port	990
	27	Nagoya Port	670
Mie Pref.	28	Yokkaichi Port	1,500
	29	Toba Port	1,700
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	560
8	31	Lake Biwa (center, offshore of Karasaki)	320
Kyoto Pref.	32	Miyazu Port	75
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	61
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	900
Osaka City	35	Osaka Port	3,900
obalia onj	36	Outside Osaka Port	370
	37	Mouth of Riv. Yodo (Osaka City)	1,900
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	1,200
Hyogo Pref.	39	Offshore of Himeji	1,400
Kobe City	40	Kobe Port (center)	1,200
Nara Pref.	41	Riv. Yamato (Oji Town)	120
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	260
Okayama Pref.	43	Offshore of Mizushima	83
Hiroshima Pref.	44	Kure Port	410
mosimia fici.	45	Hiroshima Bay	520
Yamaguchi Pref.	46	Tokuyama Bay	130
ı amagucili Fici.		- 224	
	47	Offshore of Use	63
Tolaushima Duaf	48	Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	33 tr(0)
Tokushima Pref. Kagawa Pref.	50	Takamatsu Port	tr(9) 470
Ehime Pref.			
	51	Niihama Port	25
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	350
Kitakyushu City	53	Dokai Bay	910
Fukuoka City	54	Hakata Bay	100
Saga Pref.	55	Imari Bay	1,800
Nagasaki Pref.	56	Omura Bay	210
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	51
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	tr(8)
Okinawa Pref.	61	Naha Port	1,000

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[22-2] Pentachloroanisole/sediment (pg/g-dry)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 53/61\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 53/61\ (Missing\ value: 0)$

Detection limit: 9 Quantification limit: 27

	stats
Geometric mean	tr(23)
Median	tr(25)
Maximum	160
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	160
	2	Tomakomai Port	tr(17)
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	32
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(12)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(20)
Akita Pref.	6	Lake Hachiro	tr(25)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	38
Fukushima Pref.	8	Onahama Port	84
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	39
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(23)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	tr(12)
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	31
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	45
	14	Mouth of Riv. Sumida (Minato Ward)	69
Yokohama City	15	Yokohama Port	27
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	58
·	17	Keihin Canal, Port of Kawasaki	49
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(20)
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(16)
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	tr(15)
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	29
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(24)
Nagano Pref.	23	Lake Suwa (center)	62
Shizuoka Pref.	24	Shimizu Port	42
	25	Riv. Tenryu (Iwata City)	78
Aichi Pref.	26	Kinuura Port	tr(12)
	27	Nagoya Port	35
Mie Pref.	28	Yokkaichi Port	43
	29	Toba Port	37
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	28
	31	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	32	Miyazu Port	tr(10)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	54
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	33
Osaka City	35	Osaka Port	71
osana ony	36	Outside Osaka Port	tr(14)
	37	Mouth of Riv. Yodo (Osaka City)	49
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	tr(19)
Hyogo Pref.	39	Offshore of Himeji	71
Kobe City	40	Kobe Port (center)	tr(9)
Nara Pref.	41	Riv. Yamato (Oji Town)	27
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	89
Okayama Pref.	43	Offshore of Mizushima	31
Hiroshima Pref.	44	Kure Port	tr(18)
mosimia fici.	45	Hiroshima Bay	tr(12)
Yamaguchi Pref.	46	Tokuyama Bay	nd
ı amagucili Fici.		- 224	
	47	Offshore of Use	nd
Tokushima Pref.	48	Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	nd tr(17)
		Takamatsu Port	tr(17)
Kagawa Pref.	50		nd
Ehime Pref.	51	Niihama Port Mayth of Biy, Shimanta (Shimanta City)	nd 43
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	
Kitakyushu City	53	Dokai Bay	tr(25)
Fukuoka City	54	Hakata Bay	tr(9)
Saga Pref.	55	Imari Bay	tr(20)
Nagasaki Pref.	56	Omura Bay	tr(26)
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	140
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	tr(21)
Okinawa Pref.	61	Naha Port	tr(19)

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[23] Short-chain chlorinated paraffins/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 16/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 16/61\ (Missing\ value: 0) \end{array}$

Detection limit: *12,000 Quantification limit: *36,000

	stats
Geometric mean	nd
Median	nd
Maximum	73,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Homando	2	Tomakomai Port	nd
Iwate Pref.	3	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	tr(12,000)
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	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	tr(14,000)
1 okyo wiet.	14	Mouth of Riv. Sumida (Minato Ward)	73.000
Yokohama City	15	Yokohama Port	tr(25,000)
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	tr(15,000)
Kawasaki City	17	Keihin Canal, Port of Kawasaki	59,000
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
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)	nd
Shizuoka Pref.			
Snizuoka Prei.	24	Shimizu Port Pire Towara (Ivoto City)	tr(20,000)
Aichi Pref.	25	Riv. Tenryu (Iwata City) Kinuura Port	nd
Aichi Prei.	26		tr(20,000)
Mi- D£	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	nd
CI. D. C	29	Toba Port	39,000
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	nd
IZ (D C	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.	34	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	35	Osaka Port	tr(32,000)
	36	Outside Osaka Port	nd
	37	Mouth of Riv. Yodo (Osaka City)	tr(19,000)
II D C	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
Hyogo Pref.	39	Offshore of Himeji	nd
Kobe City	40	Kobe Port (center)	tr(24,000)
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
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	tr(20,000)
	45	Hiroshima Bay	nd
Yamaguchi Pref.	46	Tokuyama Bay	nd
	47	Offshore of Ube	nd
m 1 1: n a	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	tr(16,000)
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	36,000
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.	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	39,000

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

⁽Note 3) tr : detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

⁽Note 5) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[23-1] Chlorinated decanes/sediment (pg/g-dry)

Monitored year :2018

Detection Frequency (site): 7/61 (Missing value: 0)
Detection Frequency (sample): 7/61 (Missing value: 0)

Detection limit : 2,000 Quantification limit : 6,000

	stats
Geometric mean	nd
Median	nd
Maximum	7,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
HOKKAIGO	2	Tomakomai Port	nd
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	nd
	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	
Sendai City			nd
Akita Pref.	6	Lake Hachiro	nd 1
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	tr(2,000)
Ibaraki Pref.		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	tr(2,000)
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	nd
*** 1 1 80	14	Mouth of Riv. Sumida (Minato Ward)	tr(2,000)
Yokohama City	15	Yokohama Port	nd
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	nd
	17	Keihin Canal, Port of Kawasaki	tr(2,000)
Niigata Pref.	18	Lower Riv. Shinano (Niigata City)	tr(2,000)
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.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	23	Lake Suwa (center)	nd
Shizuoka Pref.	24	Shimizu Port	nd
	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	nd
	29	Toba Port	tr(3,000)
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.	34	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	35	Osaka Port	nd
	36	Outside Osaka Port	nd
	37	Mouth of Riv. Yodo (Osaka City)	nd
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
Hyogo Pref.	39	Offshore of Himeji	nd
Kobe City	40	Kobe Port (center)	nd
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
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	nd
	45	Hiroshima Bay	nd
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	nd
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	7,000
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.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
ragosimia i ici.	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	nd
Okiliawa Fiel.	UI	Ivalia I Oit	IIU

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

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

[23-2] Chlorinated undecanes/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 7/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 7/61\ (Missing\ value: 0) \end{array}$

Detection limit : 5,000 Quantification limit : 15,000

	stats
Geometric mean	nd
Median	nd
Maximum	tr(13,000)
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
	2	Tomakomai Port	nd
Iwate Pref.	3	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	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	nd
Tokyo Wici.	14	Mouth of Riv. Sumida (Minato Ward)	tr(13,000)
Yokohama City	15	Yokohama Port	nd
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	nd
Kawasaki City	17	Keihin Canal, Port of Kawasaki	
Nii		· · · · · · · · · · · · · · · · · · ·	nd
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
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)	nd
Shizuoka Pref.	24	Shimizu Port	tr(8,000)
	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	nd
	29	Toba Port	tr(7,000)
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.	34	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	35	Osaka Port	tr(5,000)
ĺ	36	Outside Osaka Port	nd
	37	Mouth of Riv. Yodo (Osaka City)	nd
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
Hyogo Pref.	39	Offshore of Himeji	nd
Kobe City	40	Kobe Port (center)	nd
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
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	tr(8,000)
THOSHIIIA FICE.	45	Hiroshima Bay	nd
Yamaguchi Pref.	46	·	
i amaguem Pref.		Tokuyama Bay	nd
ŀ	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.	50	Takamatsu Port	nd
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	tr(8,000)
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.	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	tr(7,000)

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

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

⁽Note 5) * : indicates the sum value of the Quantification [Detection] limits of each congener.

[23-3] Chlorinated dodecanes/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 28/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 28/61\ (Missing\ value: 0) \end{array}$

Detection limit : 2,000 Quantification limit : 6,000

	stats
Geometric mean	tr(2,000)
Median	nd
Maximum	38,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(3,000)
11011111110	2	Tomakomai Port	tr(3,000)
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(2,000)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	tr(2,000)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(2,000)
Fukushima Pref.	8	Onahama Port	tr(4,000)
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	tr(2,000)
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	7,000
Tolly's Titeli	14	Mouth of Riv. Sumida (Minato Ward)	22,000
Yokohama City	15	Yokohama Port	16,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	6,000
Kawasaki City	17	Keihin Canal, Port of Kawasaki	38,000
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)	tr(2,000)
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Shoho (1 Suruga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	23	Lake Suwa (center)	nd
Shizuoka Pref.	24	Shimizu Port	tr(5,000)
Silizuoka Fiel.	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	14,000
Alcili Fiel.	27	Nagoya Port	14,000 nd
Mie Pref.	28	Yokkaichi Port	nd
Mie Fiei.	29	Toba Port	
Chica Duaf	30		11,000
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	nd
Vt- Df	31	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	tr(4,000)
Osaka City	35 36	Osaka Port	10,000
-		Outside Osaka Port	nd
-	37	Mouth of Riv. Yodo (Osaka City)	8,000
II D£	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	tr(2,000)
Hyogo Pref.	39	Offshore of Himeji	tr(2,000)
Kobe City	40	Kobe Port (center)	11,000
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
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	tr(5,000)
	45	Hiroshima Bay	tr(2,000)
Yamaguchi Pref.	46	Tokuyama Bay	nd
-	47	Offshore of Ube	nd
T 1 1 2 2 2	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd (5.222)
Kagawa Pref.	50	Takamatsu Port	tr(5,000)
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	11,000
Fukuoka City	54	Hakata Bay	nd
Saga Pref.	55	Imari Bay	tr(3,000)
Saga Pref. Nagasaki Pref.	55 56	Omura Bay	nd
Saga Pref. Nagasaki Pref. Oita Pref.	55 56 57	Omura Bay Mouth of Riv. Oita (Oita City)	``. '
Saga Pref. Nagasaki Pref.	55 56 57 58	Omura Bay	nd
Saga Pref. Nagasaki Pref. Oita Pref.	55 56 57	Omura Bay Mouth of Riv. Oita (Oita City) Mouth of Riv. Oyodo (Miyazaki City) Riv. Amori (Kirishima City)	nd nd
Saga Pref. Nagasaki Pref. Oita Pref. Miyazaki Pref.	55 56 57 58	Omura Bay Mouth of Riv. Oita (Oita City) Mouth of Riv. Oyodo (Miyazaki City)	nd nd 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 2) Data treated as detected means detection limit value and more.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[23-4] Chlorinated tridecanes/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 24/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 24/61\ (Missing\ value: 0) \end{array}$

Detection limit : 3,000 Quantification limit : 9,000

	stats
Geometric mean	nd
Median	nd
Maximum	36,000
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(3,000)
11011111110	2	Tomakomai Port	tr(3,000)
Iwate Pref.	3	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	tr(6,000)
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	tr(6,000)
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	tr(7,000)
Tokyo Wict.	14	Mouth of Riv. Sumida (Minato Ward)	36,000
Yokohama City	15	Yokohama Port	9,000
•	16		9,000
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	19,000
Milionto Buof	18	·	,
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref. Ishikawa Pref.	19 20	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd nd
Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City)	
Yamanashi Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	23	Lake Suwa (center)	nd
Shizuoka Pref.	24	Shimizu Port	tr(7,000)
4:1:D C	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	tr(6,000)
) (; D (;	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	tr(3,000)
ati n a	29	Toba Port	18,000
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.	34	Mouth of Riv. Yamato (Sakai City)	tr(7,000)
Osaka City	35	Osaka Port	17,000
	36	Outside Osaka Port	nd
	37	Mouth of Riv. Yodo (Osaka City)	11,000
	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
Hyogo Pref.	39	Offshore of Himeji	tr(4,000)
Kobe City	40	Kobe Port (center)	13,000
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
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	tr(7,000)
	45	Hiroshima Bay	tr(3,000)
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	11,000
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	10,000
Fukuoka City	54	Hakata Bay	nd
Saga Pref.	55	Imari Bay	tr(8,000)
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
<i>G</i>	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	23,000
_ 1111111111111111111111111111111111111	71	la como el est	25,000

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[25] Perfluorohexane sulfonic acid (PFHxS)/sediment (pg/g-dry)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 15/61\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 15/61\ (Missing\ value: 0) \end{array}$

Detection limit : 5 Quantification limit : 11

	stats
Geometric mean	nd
Median	nd
Maximum	27
Minimum	nd

Local communities	No	Monitored sites	measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
	2	Tomakomai Port	nd
Iwate Pref.	3	Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(10)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(7)
Akita Pref.	6	Lake Hachiro	19
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)	tr(5)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	nd
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	tr(8)
1011,011.1011	14	Mouth of Riv. Sumida (Minato Ward)	24
Yokohama City	15	Yokohama Port	nd
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	nd
124454111 0109	17	Keihin Canal, Port of Kawasaki	nd
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
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)	nd
Shizuoka Pref.	24	Shimizu Port	nd
Sinzuoka i ici.	25	Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	nd
Alcili I Ici.	27	Nagoya Port	nd
Mie Pref.	28	Yokkaichi Port	nd
IVIIC I ICI.	29	Toba Port	nd
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	19
Siliga I ICI.	31	Lake Biwa (center, offshore of Karasaki)	27
Kyoto Pref.	32	Miyazu Port	tr(7)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	35	Osaka Port	nd
Osuku City	36	Outside Osaka Port	nd
ŀ	37	Mouth of Riv. Yodo (Osaka City)	nd
ŀ	38	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
Hyogo Pref.	39	Offshore of Himeji	nd
Kobe City	40	Kobe Port (center)	19
Nara Pref.	41	Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	43	Offshore of Mizushima	tr(10)
Hiroshima Pref.	44	Kure Port	nd
THOSHIIIa FICI.	45	Hiroshima Bay	16
Yamaguchi Pref.	46	Tokuyama Bay	21
i amagucini riei.	47	Offshore of Ube	1
ŀ	48	Offshore of Hagi	nd nd
Tokushima Pref.	48	Mouth of Riv. Yoshino (Tokushima City)	nd nd
	50	Takamatsu Port	
Kagawa Pref. Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd nd
		Dokai Bay	
Kitakyushu City Fukuoka City	53 54	Hakata Bay	nd 11
Saga Pref.			
v	55	Imari Bay	nd 21
Nagasaki Pref.	56	Omura Bay Mouth of Pire Oite (Oite Cite)	21
Oita Pref.	57	Mouth of Riv. Orta (Otta City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd 1
Okinawa Pref.	60	Riv. Gotanda (Ichikikushikino City)	nd
	61	Naha Port	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 2) Data treated as detected means detection limit value and more.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[1] Total Polychlorinated biphenyls (Total PCBs)/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0) Detection limit: *21

 $Quantification\ limit: *63$

	stats
Geometric mean	11,000
Median	12,000
Maximum	280,000
Minimum	740

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	2,000	12,000	110,000
Median	900	12,000	110,000
Maximum	12,000	280,000	130,000
Minimum	740	1,200	85,000

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	900
	Yokohama City	2	Yokohama Port	Blue mussel	12,000
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	740
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	4,500
		2	Offshore of Kushiro	Chum salmon	1,200
	Iwate Pref.	3	Yamada Bay	Greenling	1,700
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	7,800
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	1,600
	Tokyo Met.	6	Tokyo Bay	Sea bass	100,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	69,000
	Nagoya City	8	Nagoya Port	Striped mullet	19,000
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	15,000
	Osaka Pref.	10	Osaka Bay	Sea bass	280,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	75,000
	Tottori Pref.	12	Nakaumi	Sea bass	8,400
	Hiroshima City	13	Hiroshima Bay	Sea bass	47,000
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	26,000
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	1,200
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	17,000
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	3,200
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	8,400
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	85,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	130,000
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	2,600,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	3,200
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	12,000,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	27,000

⁽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.

⁽Note 3) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[1-1] Monochlorobiphenyls/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 20/23 (Missing value : 0)
Detection Frequency (sample) : 20/23 (Missing value : 0)

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 3 \end{aligned}$

	stats
Geometric mean	tr(2)
Median	tr(1)
Maximum	53
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	17/18	0/2
Detection Frequency (sample)	3/3	17/18	0/2
Geometric mean	tr(2)	tr(2)	nd
Median	tr(1)	tr(2)	nd
Maximum	5	53	nd
Minimum	tr(1)	nd	nd

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(1)
	Yokohama City	2	Yokohama Port	Blue mussel	5
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(1)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(1)
		2	Offshore of Kushiro	Chum salmon	tr(1)
	Iwate Pref.	3	Yamada Bay	Greenling	tr(1)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(1)
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	tr(2)
	Tokyo Met.	6	Tokyo Bay	Sea bass	4
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	6
	Nagoya City	8	Nagoya Port	Striped mullet	10
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	tr(1)
	Osaka Pref.	10	Osaka Bay	Sea bass	53
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	14
	Tottori Pref.	12	Nakaumi	Sea bass	tr(1)
	Hiroshima City	13	Hiroshima Bay	Sea bass	4
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	6
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(1)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	tr(2)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(1)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	tr(1)
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	tr(4)
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[1-2] Dichlorobiphenyls/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 22/23 (Missing value : 0)
Detection Frequency (sample) : 22/23 (Missing value : 0)

Detection limit : 5 Quantification limit : 15

	stats
Geometric mean	31
Median	18
Maximum	2,200
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	33	39	nd
Median	26	19	nd
Maximum	85	2,200	tr(5)
Minimum	16	tr(5)	nd

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	26
	Yokohama City	2	Yokohama Port	Blue mussel	85
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	16
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(12)
		2	Offshore of Kushiro	Chum salmon	48
	Iwate Pref.	3	Yamada Bay	Greenling	tr(10)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	20
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	18
	Tokyo Met.	6	Tokyo Bay	Sea bass	110
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	220
	Nagoya City	8	Nagoya Port	Striped mullet	210
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	tr(10)
	Osaka Pref.	10	Osaka Bay	Sea bass	2,200
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	330
	Tottori Pref.	12	Nakaumi	Sea bass	16
	Hiroshima City	13	Hiroshima Bay	Sea bass	95
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	160
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(5)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	15
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(5)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(7)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	tr(5)
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	7
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	170
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[1-3] Trichlorobiphenyls/wildlife (pg/g-wet)

Monitored year :2018

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

Detection limit : 5 Quantification limit : 15

	stats
Geometric mean	350
Median	200
Maximum	41,000
Minimum	tr(9)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	130	340	2,200
Median	51	180	2,300
Maximum	950	41,000	2,400
Minimum	42	tr(9)	2,100

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	51
	Yokohama City	2	Yokohama Port	Blue mussel	950
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	42
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	110
		2	Offshore of Kushiro	Chum salmon	90
	Iwate Pref.	3	Yamada Bay	Greenling	61
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	220
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	160
	Tokyo Met.	6	Tokyo Bay	Sea bass	3,100
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	6,500
	Nagoya City	8	Nagoya Port	Striped mullet	2,900
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	200
	Osaka Pref.	10	Osaka Bay	Sea bass	41,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	3,200
	Tottori Pref.	12	Nakaumi	Sea bass	150
	Hiroshima City	13	Hiroshima Bay	Sea bass	810
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	1,200
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	17
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	130
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	33
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(9)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	2,400
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	2,100
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	36,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	150
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	570,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	3,300

⁽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.

⁽Note 3) tr : detection limit value and more, less than Quantification limit value.

[1-4] Tetrachlorobiphenyls/wildlife (pg/g-wet)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 23/23\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 23/23\ (Missing\ value: 0) \end{array}$

Detection limit : 4 Quantification limit : 12

	stats
Geometric mean	1,400
Median	900
Maximum	86,000
Minimum	75

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	320	1,400	8,900
Median	110	870	9,000
Maximum	3,000	86,000	9,000
Minimum	100	75	8,900

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	110
	Yokohama City	2	Yokohama Port	Blue mussel	3,000
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	100
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	500
		2	Offshore of Kushiro	Chum salmon	280
	Iwate Pref.	3	Yamada Bay	Greenling	170
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	900
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	400
	Tokyo Met.	6	Tokyo Bay	Sea bass	20,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	24,000
	Nagoya City	8	Nagoya Port	Striped mullet	7,000
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	1,900
	Osaka Pref.	10	Osaka Bay	Sea bass	86,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	9,200
	Tottori Pref.	12	Nakaumi	Sea bass	820
	Hiroshima City	13	Hiroshima Bay	Sea bass	4,500
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	3,600
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	75
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	840
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	220
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	77
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	9,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	8,900
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	180,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	510
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,400,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	6,700

(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.

 $[1\text{-}4\text{-}1]\ 3\text{,}3'\text{,}4\text{,}4'\text{-}Tetrachlorobiphenyl}\ (\#77)\text{/wildlife}\ (pg/g\text{-wet})$

Monitored year :2018

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

Detection limit : 0.6 Quantification limit : 1.6

	stats
Geometric mean	9.7
Median	5.0
Maximum	340
Minimum	tr(0.8)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	5.5	9.5	26
Median	3.3	4.6	33
Maximum	22	340	53
Minimum	2.3	tr(0.8)	13

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	2.3
	Yokohama City	2	Yokohama Port	Blue mussel	22
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	3.3
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	3.1
		2	Offshore of Kushiro	Chum salmon	tr(1.5)
	Iwate Pref.	3	Yamada Bay	Greenling	2.2
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	5.0
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	3.9
	Tokyo Met.	6	Tokyo Bay	Sea bass	59
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	86
	Nagoya City	8	Nagoya Port	Striped mullet	36
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	34
	Osaka Pref.	10	Osaka Bay	Sea bass	340
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	50
	Tottori Pref.	12	Nakaumi	Sea bass	2.6
	Hiroshima City	13	Hiroshima Bay	Sea bass	23
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	25
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(1.2)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	4.1
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	3.4
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(0.8)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	53
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	13
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	150
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	750
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	2.1

(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.

⁽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 :2018

Detection Frequency (site): 11/23 (Missing value: 0) Detection Frequency (sample): 11/23 (Missing value: 0)

 $\begin{aligned} & Detection \ limit: 0.6 \\ & Quantification \ limit: 1.5 \end{aligned}$

	stats
Geometric mean	tr(1.0)
Median	nd
Maximum	23
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	8/18	2/2
Detection Frequency (sample)	1/3	8/18	2/2
Geometric mean	nd	tr(0.8)	19
Median	nd	nd	20
Maximum	tr(0.8)	18	23
Minimum	nd	nd	16

	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(0.8)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	nd
		2	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(1.3)
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	2.9
	Nagoya City	8	Nagoya Port	Striped mullet	2.5
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	3.1
	Osaka Pref.	10	Osaka Bay	Sea bass	18
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	2.2
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(1.0)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	1.7
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	16
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	23
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	400
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	720
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	tr(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[1-5] Pentachlorobiphenyls/wildlife (pg/g-wet)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 23/23\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 23/23\ (Missing\ value: 0) \end{array}$

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 3 \end{aligned}$

	stats
Geometric mean	2,800
Median	2,700
Maximum	78,000
Minimum	200

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	560	2,900	27,000
Median	230	2,700	27,000
Maximum	3,800	78,000	30,000
Minimum	200	260	24,000

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	230
	Yokohama City	2	Yokohama Port	Blue mussel	3,800
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	200
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	1,300
		2	Offshore of Kushiro	Chum salmon	380
	Iwate Pref.	3	Yamada Bay	Greenling	410
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	2,100
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	510
	Tokyo Met.	6	Tokyo Bay	Sea bass	40,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	23,000
	Nagoya City	8	Nagoya Port	Striped mullet	4,900
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	5,900
	Osaka Pref.	10	Osaka Bay	Sea bass	78,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	16,000
	Tottori Pref.	12	Nakaumi	Sea bass	2,600
	Hiroshima City	13	Hiroshima Bay	Sea bass	9,500
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	5,000
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	260
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	2,700
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	830
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	340
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	24,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	30,000
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	630,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	1,100
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	2,500,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	6,600

 $[1\text{-}5\text{-}1]\ 2,3,3',4,4'\text{-}Pentachlorobiphenyl}\ (\#105)/wildlife\ (pg/g\text{-wet})$

Monitored year :2018

 $\begin{array}{l} \mbox{Detection Frequency (site)}: 23/23 \mbox{ (Missing value}: 0) \\ \mbox{Detection Frequency (sample)}: 23/23 \mbox{ (Missing value}: 0) \\ \mbox{Detection limit}: 0.7 \\ \end{array}$

Detection limit: 0.7 Quantification limit: 1.9

	stats
Geometric mean	160
Median	170
Maximum	4,000
Minimum	11

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	30	150	3,300
Median	13	140	3,400
Maximum	180	3,100	4,000
Minimum	11	15	2,800

	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	180
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	11
Fish	Hokkaido		Offshore of Kushiro	Rock greenling	100
		2	Offshore of Kushiro	Chum salmon	15
	Iwate Pref.	3	Yamada Bay	Greenling	35
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	170
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	22
	Tokyo Met.	6	Tokyo Bay	Sea bass	2,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	1,100
	Nagoya City	8	Nagoya Port	Striped mullet	300
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	370
	Osaka Pref.	10	Osaka Bay	Sea bass	3,100
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	630
	Tottori Pref.	12	Nakaumi	Sea bass	82
	Hiroshima City	13	Hiroshima Bay	Sea bass	250
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	190
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	19
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	110
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	67
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	25
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	2,800
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	4,000
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	91,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	190
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	250,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	640

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

Monitored year :2018

Detection Frequency (site): 22/23 (Missing value: 0)
Detection Frequency (sample): 22/23 (Missing value: 0)

Detection limit : 0.8 Quantification limit : 2.1

	stats
Geometric mean	10
Median	9.1
Maximum	370
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	18/18	2/2
Detection Frequency (sample)	2/3	18/18	2/2
Geometric mean	tr(1.4)	9.7	300
Median	tr(0.8)	9.2	310
Maximum	9.1	210	370
Minimum	nd	tr(0.9)	240

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(0.8)
	Yokohama City	2	Yokohama Port	Blue mussel	9.1
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	8.8
		2	Offshore of Kushiro	Chum salmon	tr(1.5)
	Iwate Pref.	3	Yamada Bay	Greenling	tr(2.0)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	11
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	2.1
	Tokyo Met.	6	Tokyo Bay	Sea bass	130
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	78
	Nagoya City	8	Nagoya Port	Striped mullet	18
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	25
	Osaka Pref.	10	Osaka Bay	Sea bass	210
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	34
	Tottori Pref.	12	Nakaumi	Sea bass	4.1
	Hiroshima City	13	Hiroshima Bay	Sea bass	14
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	9.6
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(0.9)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	7.1
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	4.8
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(1.6)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	240
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	370
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	7,900
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	11
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	22,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	46

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

 $[1\text{-}5\text{-}3]\ 2,3',4,4'\text{-}5\text{-}Pentachlorobiphenyl}\ (\#118)/wildlife\ (pg/g\text{-}wet)$

Monitored year :2018

 $\begin{array}{ll} \mbox{Detection Frequency (site)}: 23/23 \mbox{ (Missing value}: 0) \\ \mbox{Detection Frequency (sample)}: 23/23 \mbox{ (Missing value}: 0) \\ \mbox{Detection limit}: 0.7 \\ \end{array}$

Detection limit: 0.7 Quantification limit: 1.9

	stats
Geometric mean	530
Median	550
Maximum	15,000
Minimum	37

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	95	500	12,000
Median	42	510	13,000
Maximum	550	10,000	15,000
Minimum	37	46	10,000

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	37
	Yokohama City	2	Yokohama Port	Blue mussel	550
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	42
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	320
		2	Offshore of Kushiro	Chum salmon	46
	Iwate Pref.	3	Yamada Bay	Greenling	96
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	590
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	72
	Tokyo Met.	6	Tokyo Bay	Sea bass	7,500
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	3,700
	Nagoya City	8	Nagoya Port	Striped mullet	750
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	980
•	Osaka Pref.	10	Osaka Bay	Sea bass	10,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	2,400
	Tottori Pref.	12	Nakaumi	Sea bass	430
	Hiroshima City	13	Hiroshima Bay	Sea bass	1,100
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	750
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	55
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	400
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	170
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	97
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	10,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	15,000
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	300,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	460
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,000,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	2,300

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

Monitored year :2018

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

Detection limit : 0.5 Quantification limit : 1.4

	stats
Geometric mean	9.8
Median	9.0
Maximum	320
Minimum	tr(0.8)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	2.2	8.9	240
Median	tr(1.1)	8.2	250
Maximum	9.5	180	320
Minimum	tr(1.0)	tr(0.8)	180

	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	9.5
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(1.1)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	4.8
		2	Offshore of Kushiro	Chum salmon	tr(0.9)
	Iwate Pref.	3	Yamada Bay	Greenling	2.1
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	9.0
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	1.8
	Tokyo Met.	6	Tokyo Bay	Sea bass	110
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	68
	Nagoya City	8	Nagoya Port	Striped mullet	20
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	23
	Osaka Pref.	10	Osaka Bay	Sea bass	180
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	41
	Tottori Pref.	12	Nakaumi	Sea bass	5.3
	Hiroshima City	13	Hiroshima Bay	Sea bass	21
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	15
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(0.8)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	7.3
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	3.2
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(1.0)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	180
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	320
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	5,600
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	6.8
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	16,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	29

⁽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.

⁽Note 3) tr : detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 19/23 (Missing value: 0) Detection Frequency (sample): 19/23 (Missing value: 0)

 $\begin{aligned} & Detection \ limit: 0.8 \\ & Quantification \ limit: 2.1 \end{aligned}$

	stats
Geometric mean	3.0
Median	2.4
Maximum	110
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	15/18	2/2
Detection Frequency (sample)	2/3	15/18	2/2
Geometric mean	tr(1.0)	2.5	68
Median	tr(1.2)	2.6	76
Maximum	2.1	21	110
Minimum	nd	nd	42

	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	2.1
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(1.2)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	2.4
		2	Offshore of Kushiro	Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	tr(1.3)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	2.4
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	tr(0.8)
	Tokyo Met.	6	Tokyo Bay	Sea bass	12
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	6.2
	Nagoya City	8	Nagoya Port	Striped mullet	3.1
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	9.9
	Osaka Pref.	10	Osaka Bay	Sea bass	21
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	13
	Tottori Pref.	12	Nakaumi	Sea bass	tr(1.1)
	Hiroshima City	13	Hiroshima Bay	Sea bass	5.6
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	4.3
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	2.8
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(1.0)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	42
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	110
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	1,800
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	2,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	tr(2.0)

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[1-6] Hexachlorobiphenyls/wildlife (pg/g-wet)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 23/23\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 23/23\ (Missing\ value: 0)$

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 3 \end{aligned}$

	stats
Geometric mean	3,800
Median	3,200
Maximum	63,000
Minimum	300

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	690	3,800	48,000
Median	350	3,500	50,000
Maximum	3,100	54,000	63,000
Minimum	300	300	36,000

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	350
	Yokohama City	2	Yokohama Port	Blue mussel	3,100
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	300
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	1,800
		2	Offshore of Kushiro	Chum salmon	300
	Iwate Pref.	3	Yamada Bay	Greenling	680
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	3,200
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	390
	Tokyo Met.	6	Tokyo Bay	Sea bass	30,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	12,000
	Nagoya City	8	Nagoya Port	Striped mullet	3,100
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	5,700
	Osaka Pref.	10	Osaka Bay	Sea bass	54,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	27,000
	Tottori Pref.	12	Nakaumi	Sea bass	3,700
	Hiroshima City	13	Hiroshima Bay	Sea bass	21,000
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	9,200
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	510
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	7,700
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	1,300
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	1,700
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	36,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	63,000
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	1,200,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	1,200
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	4,400,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	7,200

 $[1\text{-}6\text{-}1]\ 2,3,3',4,4',5\text{-}Hexachlorobiphenyl}\ (\#156)/wildlife\ (pg/g\text{-wet})$

Monitored year :2018

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

Detection limit: 0.8 Quantification limit: 2.1

	stats
Geometric mean	57
Median	63
Maximum	2,800
Minimum	2.4

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	8.8	53	1,900
Median	4.8	63	2,100
Maximum	37	820	2,800
Minimum	3.8	2.4	1,300

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	3.8
	Yokohama City	2	Yokohama Port	Blue mussel	37
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	4.8
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	32
		2	Offshore of Kushiro	Chum salmon	2.4
	Iwate Pref.	3	Yamada Bay	Greenling	15
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	63
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	4.8
	Tokyo Met.	6	Tokyo Bay	Sea bass	600
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	250
	Nagoya City	8	Nagoya Port	Striped mullet	64
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	130
	Osaka Pref.	10	Osaka Bay	Sea bass	820
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	310
	Tottori Pref.	12	Nakaumi	Sea bass	36
	Hiroshima City	13	Hiroshima Bay	Sea bass	120
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	78
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	9.4
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	63
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	29
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	18
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	1,300
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	2,800
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	50,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	39
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	160,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	160

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

Monitored year :2018

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

Detection limit : 0.9 Quantification limit : 2.3

	stats
Geometric mean	15
Median	16
Maximum	660
Minimum	tr(1.0)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	2.5	14	430
Median	tr(1.5)	17	470
Maximum	9.0	180	660
Minimum	tr(1.2)	tr(1.0)	280

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(1.2)
	Yokohama City	2	Yokohama Port	Blue mussel	9.0
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(1.5)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	12
		2	Offshore of Kushiro	Chum salmon	tr(1.0)
	Iwate Pref.	3	Yamada Bay	Greenling	4.3
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	19
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	tr(1.7)
	Tokyo Met.	6	Tokyo Bay	Sea bass	130
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	56
	Nagoya City	8	Nagoya Port	Striped mullet	17
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	29
	Osaka Pref.	10	Osaka Bay	Sea bass	180
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	71
	Tottori Pref.	12	Nakaumi	Sea bass	11
	Hiroshima City	13	Hiroshima Bay	Sea bass	31
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	16
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	2.4
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	17
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	8.3
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	4.3
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	280
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	660
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	12,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	9.6
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	29,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	30

⁽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.

⁽Note 3) tr : detection limit value and more, less than Quantification limit value.

 $[1\text{-}6\text{-}3]\ 2,3',4,4',5,5'\text{-}Hexachlorobiphenyl}\ (\#167)/wildlife\ (pg/g\text{-wet})$

Monitored year :2018

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0) Detection limit: 0.7

Quantification limit: 1.8

	stats
Geometric mean	34
Median	34
Maximum	1,500
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	6.1	31	920
Median	2.9	35	1,000
Maximum	27	400	1,500
Minimum	2.9	1.9	570

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	2.9
	Yokohama City	2	Yokohama Port	Blue mussel	27
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	2.9
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	18
		2	Offshore of Kushiro	Chum salmon	1.9
	Iwate Pref.	3	Yamada Bay	Greenling	7.3
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	35
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	3.7
	Tokyo Met.	6	Tokyo Bay	Sea bass	290
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	110
	Nagoya City	8	Nagoya Port	Striped mullet	34
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	64
	Osaka Pref.	10	Osaka Bay	Sea bass	400
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	180
	Tottori Pref.	12	Nakaumi	Sea bass	31
	Hiroshima City	13	Hiroshima Bay	Sea bass	89
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	57
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	4.7
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	42
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	13
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	13
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	570
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	1,500
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	25,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	16
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	66,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	60

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

Monitored year :2018

Detection Frequency (site): 6/23 (Missing value: 0)
Detection Frequency (sample): 6/23 (Missing value: 0)

 $\begin{aligned} & Detection \ limit: 0.8 \\ & Quantification \ limit: 2 \end{aligned}$

	stats
Geometric mean	nd
Median	nd
Maximum	30
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	11
Median	nd	nd	17
Maximum	nd	tr(1.8)	30
Minimum	nd	nd	4.4

	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	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(1.0)
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	tr(1.1)
	Osaka Pref.	10	Osaka Bay	Sea bass	tr(1.1)
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	tr(1.8)
	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	4.4
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	30
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	310
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	180
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[1-7] Heptachlorobiphenyls/wildlife (pg/g-wet)

Monitored year :2018

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

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 3 \end{aligned}$

	stats
Geometric mean	1,400
Median	1,100
Maximum	20,000
Minimum	73

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	200	1,500	15,000
Median	120	1,200	16,000
Maximum	870	17,000	20,000
Minimum	73	80	11.000

	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	870
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	73
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	650
		2	Offshore of Kushiro	Chum salmon	80
	Iwate Pref.	3	Yamada Bay	Greenling	310
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	1,100
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	110
	Tokyo Met.	6	Tokyo Bay	Sea bass	7,800
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	2,600
	Nagoya City	8	Nagoya Port	Striped mullet	930
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	1,200
	Osaka Pref.	10	Osaka Bay	Sea bass	17,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	16,000
	Tottori Pref.	12	Nakaumi	Sea bass	980
	Hiroshima City	13	Hiroshima Bay	Sea bass	9,900
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	5,300
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	290
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	4,600
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	640
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	3,300
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	11,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	20,000
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	420,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	250
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	2,600,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	2,700

 $\hbox{ [1-7-1] 2,2',3,3',4,4',5-Heptachlorobiphenyl (\#170)/wildlife (pg/g-wet) }$

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 23/23\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 23/23\ (Missing\ value: 0) \end{array}$

Detection limit : 0.9 Quantification limit : 2.2

	stats
Geometric mean	110
Median	110
Maximum	3,700
Minimum	2.5

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	5.7	120	2,600
Median	2.5	130	2,800
Maximum	29	1,400	3,700
Minimum	2.5	4.1	1,800

	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	29
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	2.5
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	78
		2	Offshore of Kushiro	Chum salmon	4.1
	Iwate Pref.	3	Yamada Bay	Greenling	25
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	110
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	8.1
	Tokyo Met.	6	Tokyo Bay	Sea bass	740
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	270
	Nagoya City	8	Nagoya Port	Striped mullet	110
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	150
	Osaka Pref.	10	Osaka Bay	Sea bass	1,400
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	1,400
	Tottori Pref.	12	Nakaumi	Sea bass	64
	Hiroshima City	13	Hiroshima Bay	Sea bass	520
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	430
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	25
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	290
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	63
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	140
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	1,800
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	3,700
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	64,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	49
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	360,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	390

 $[1\text{-}7\text{-}2]\ 2,2',3,4,4',5,5'\text{-}Heptachlorobiphenyl}\ (\#180)/wildlife\ (pg/g\text{-}wet)$

Monitored year :2018

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

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 3 \end{aligned}$

	stats
Geometric mean	330
Median	270
Maximum	7,800
Minimum	8

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	24	380	5,400
Median	12	300	5,800
Maximum	140	4,600	7,800
Minimum	8	15	3,700

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	12
	Yokohama City	2	Yokohama Port	Blue mussel	140
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	8
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	220
		2	Offshore of Kushiro	Chum salmon	15
	Iwate Pref.	3	Yamada Bay	Greenling	91
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	330
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	24
	Tokyo Met.	6	Tokyo Bay	Sea bass	2,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	680
	Nagoya City	8	Nagoya Port	Striped mullet	260
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	270
	Osaka Pref.	10	Osaka Bay	Sea bass	4,400
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	4,600
	Tottori Pref.	12	Nakaumi	Sea bass	200
	Hiroshima City	13	Hiroshima Bay	Sea bass	1,700
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	1,300
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	77
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	950
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	160
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	1,200
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	3,700
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	7,800
ı İ	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	160,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	79
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,000,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	790

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

Monitored year :2018

Detection Frequency (site) : 21/23 (Missing value : 0)
Detection Frequency (sample) : 21/23 (Missing value : 0)

Detection limit : 0.9 Quantification limit : 2.2

	stats
Geometric mean	7.2
Median	6.5
Maximum	300
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(1.1)	6.9	170
Median	tr(0.9)	6.6	200
Maximum	3.6	60	300
Minimum	nd	nd	92

	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	3.6
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(0.9)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	4.7
		2	Offshore of Kushiro	Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	tr(2.1)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	6.6
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	tr(0.9)
	Tokyo Met.	6	Tokyo Bay	Sea bass	34
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	12
	Nagoya City	8	Nagoya Port	Striped mullet	5.6
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	10
	Osaka Pref.	10	Osaka Bay	Sea bass	60
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	55
	Tottori Pref.	12	Nakaumi	Sea bass	3.6
	Hiroshima City	13	Hiroshima Bay	Sea bass	24
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	17
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(1.4)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	15
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	3.1
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	6.5
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	92
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	300
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	4,500
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	tr(1.9)
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	16,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	7.1

(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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[1-8] Octachlorobiphenyls/wildlife (pg/g-wet)

Monitored year :2018

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

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 4 \end{aligned}$

	stats
Geometric mean	220
Median	190
Maximum	4,900
Minimum	4

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	12	260	3,200
Median	7	190	3,500
Maximum	55	2,800	4,900
Minimum	4	8	2,100

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	7
	Yokohama City	2	Yokohama Port	Blue mussel	55
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	4
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	140
		2	Offshore of Kushiro	Chum salmon	8
	Iwate Pref.	3	Yamada Bay	Greenling	57
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	190
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	15
	Tokyo Met.	6	Tokyo Bay	Sea bass	960
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	290
	Nagoya City	8	Nagoya Port	Striped mullet	190
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	160
	Osaka Pref.	10	Osaka Bay	Sea bass	2,400
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	2,800
	Tottori Pref.	12	Nakaumi	Sea bass	130
	Hiroshima City	13	Hiroshima Bay	Sea bass	1,400
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	1,200
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	63
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	770
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	120
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	2,600
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	2,100
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	4,900
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	80,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	27
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	540,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	350

[1-9] Nonachlorobiphenyls/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 20/23 (Missing value : 0)
Detection Frequency (sample) : 20/23 (Missing value : 0)

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 3 \end{aligned}$

	stats
Geometric mean	19
Median	20
Maximum	1,100
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	nd	22	530
Median	nd	21	680
Maximum	tr(2)	400	1,100
Minimum	nd	nd	260

	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)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	15
		2	Offshore of Kushiro	Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	7
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	20
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	3
	Tokyo Met.	6	Tokyo Bay	Sea bass	68
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	19
	Nagoya City	8	Nagoya Port	Striped mullet	22
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	26
	Osaka Pref.	10	Osaka Bay	Sea bass	160
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	120
	Tottori Pref.	12	Nakaumi	Sea bass	11
	Hiroshima City	13	Hiroshima Bay	Sea bass	71
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	79
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	4
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	48
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	9
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	400
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	260
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	1,100
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	13,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	3
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	27,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	11

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[1-10] Decachlorobiphenyl/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 20/23 (Missing value : 0)
Detection Frequency (sample) : 20/23 (Missing value : 0)

Detection limit: 0.7 Quantification limit: 1.9

	stats
Geometric mean	7.5
Median	11
Maximum	800
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(1.2)	6.9	270
Median	nd	10	440
Maximum	13	34	800
Minimum	nd	nd	89

	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	13
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	6.3
		2	Offshore of Kushiro	Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	2.1
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	17
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	1.9
	Tokyo Met.	6	Tokyo Bay	Sea bass	30
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	9.7
	Nagoya City	8	Nagoya Port	Striped mullet	7.5
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	11
	Osaka Pref.	10	Osaka Bay	Sea bass	34
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	12
	Tottori Pref.	12	Nakaumi	Sea bass	4.3
	Hiroshima City	13	Hiroshima Bay	Sea bass	20
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	16
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(1.5)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	15
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	2.1
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	14
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	89
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	800
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	6,200
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	tr(1.1)
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	9,600
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	4.1

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[2] Hexachlorobenzene/wildlife (pg/g-wet)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 23/23\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 23/23\ (Missing\ value: 0)$

Detection limit: 1.1 Quantification limit: 3.3

	stats
Geometric mean	140
Median	150
Maximum	3,100
Minimum	14

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	21	140	2,800
Median	23	150	2,900
Maximum	28	900	3,100
Minimum	14	25	2,600

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	23
	Yokohama City	2	Yokohama Port	Blue mussel	14
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	28
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	900
		2	Offshore of Kushiro	Chum salmon	710
	Iwate Pref.	3	Yamada Bay	Greenling	160
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	160
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	530
	Tokyo Met.	6	Tokyo Bay	Sea bass	68
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	100
	Nagoya City	8	Nagoya Port	Striped mullet	140
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	700
	Osaka Pref.	10	Osaka Bay	Sea bass	180
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	180
	Tottori Pref.	12	Nakaumi	Sea bass	25
	Hiroshima City	13	Hiroshima Bay	Sea bass	150
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	150
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	37
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	130
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	31
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	27
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	2,600
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	3,100
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	41,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	96
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	34,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	110

[6] Endrin/wildlife (pg/g-wet)

Monitored year :2018

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

Detection limit: *5 Quantification limit: *16

	stats
Geometric mean	3,000
Median	2,400
Maximum	290,000
Minimum	220

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	730	2,600	80,000
Median	410	2,200	160,000
Maximum	4,400	27,000	290,000
Minimum	220	390	22,000

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	410
	Yokohama City	2	Yokohama Port	Blue mussel	4,400
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	220
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	3,000
		2	Offshore of Kushiro	Chum salmon	630
	Iwate Pref.	3	Yamada Bay	Greenling	750
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	1,400
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	1,000
	Tokyo Met.	6	Tokyo Bay	Sea bass	17,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	11,000
	Nagoya City	8	Nagoya Port	Striped mullet	2,400
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	6,400
	Osaka Pref.	10	Osaka Bay	Sea bass	27,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	4,800
	Tottori Pref.	12	Nakaumi	Sea bass	1,800
	Hiroshima City	13	Hiroshima Bay	Sea bass	4,600
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	3,700
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	390
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	2,000
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	1,700
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	1,000
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	22,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	290,000
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	1,600,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	1,600
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	680,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	1,700

⁽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.
(Note 3) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[6-1] DDTs/wildlife (pg/g-wet)

Monitored year :2018

 $\label{eq:decomposition} Detection\ Frequency\ (site): 23/23\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 23/23\ (Missing\ value: 0)$

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 3 \end{aligned}$

	stats
Geometric mean	120
Median	110
Maximum	4,800
Minimum	tr(2)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	70	150	43
Median	39	150	46
Maximum	280	4,800	63
Minimum	32	tr(2)	29

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	32
	Yokohama City	2	Yokohama Port	Blue mussel	280
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	39
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	190
		2	Offshore of Kushiro	Chum salmon	76
	Iwate Pref.	3	Yamada Bay	Greenling	110
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	75
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	130
	Tokyo Met.	6	Tokyo Bay	Sea bass	840
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	190
	Nagoya City	8	Nagoya Port	Striped mullet	170
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	tr(2)
	Osaka Pref.	10	Osaka Bay	Sea bass	4,800
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	300
	Tottori Pref.	12	Nakaumi	Sea bass	76
	Hiroshima City	13	Hiroshima Bay	Sea bass	290
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	440
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	40
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	110
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	180
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	100
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	63
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	29
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	3,600
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	3
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	5,900
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	14

⁽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.

 $⁽Note\ 3)\ tr: detection\ limit\ value\ and\ more,\ less\ than\ Quantification\ limit\ value.$

[6-2] p,p'-DDT /wildlife (pg/g-wet)

Monitored year :2018

$$\label{eq:Detection} \begin{split} & Detection\ Frequency\ (site): 23/23\ (Missing\ value: 0) \\ & Detection\ Frequency\ (sample): 23/23\ (Missing\ value: 0) \end{split}$$

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 3 \end{aligned}$

	stats
Geometric mean	2,200
Median	1,700
Maximum	290,000
Minimum	150

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	420	1,900	80,000
Median	230	1,700	160,000
Maximum	2,200	16,000	290,000
Minimum	150	290	22,000

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	230
	Yokohama City	2	Yokohama Port	Blue mussel	2,200
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	150
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	2,500
		2	Offshore of Kushiro	Chum salmon	360
	Iwate Pref.	3	Yamada Bay	Greenling	560
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	1,200
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	480
	Tokyo Met.	6	Tokyo Bay	Sea bass	13,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	8,200
	Nagoya City	8	Nagoya Port	Striped mullet	1,700
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	5,300
-	Osaka Pref.	10	Osaka Bay	Sea bass	16,000
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	3,400
	Tottori Pref.	12	Nakaumi	Sea bass	1,500
	Hiroshima City	13	Hiroshima Bay	Sea bass	3,500
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	2,400
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	290
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	1,600
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	1,300
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	840
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	22,000
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	290,000
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	1,600,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	1,600
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	670,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	1,700

[6-3] p,p'-DDE /wildlife (pg/g-wet)

Monitored year :2018

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

Detection limit : 0.6 Quantification limit : 1.4

	stats
Geometric mean	250
Median	230
Maximum	3,100
Minimum	17

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	110	280	230
Median	93	250	240
Maximum	830	3,100	260
Minimum	17	40	210

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	93
	Yokohama City	2	Yokohama Port	Blue mussel	830
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	17
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	270
		2	Offshore of Kushiro	Chum salmon	91
	Iwate Pref.	3	Yamada Bay	Greenling	46
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	120
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	230
	Tokyo Met.	6	Tokyo Bay	Sea bass	1,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	800
	Nagoya City	8	Nagoya Port	Striped mullet	420
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	970
	Osaka Pref.	10	Osaka Bay	Sea bass	3,100
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	710
	Tottori Pref.	12	Nakaumi	Sea bass	190
	Hiroshima City	13	Hiroshima Bay	Sea bass	580
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	720
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	40
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	180
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	130
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	78
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	260
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	210
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	270
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	tr(1.1)
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,300
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	8.7

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[6-4] p,p'-DDD /wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 22/23 (Missing value : 0) Detection Frequency (sample) : 22/23 (Missing value : 0)

Detection limit : 0.9 Quantification limit : 2.7

	stats
Geometric mean	24
Median	31
Maximum	1,500
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	24	34	tr(1.1)
Median	12	34	tr(1.5)
Maximum	120	1,500	tr(2.5)
Minimum	10	tr(1.1)	nd

	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	120
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	12
Fish	Hokkaido		Offshore of Kushiro	Rock greenling	31
		2	Offshore of Kushiro	Chum salmon	58
	Iwate Pref.	3	Yamada Bay	Greenling	17
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	7.6
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	66
	Tokyo Met.	6	Tokyo Bay	Sea bass	210
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	35
	Nagoya City	8	Nagoya Port	Striped mullet	15
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	92
	Osaka Pref.	10	Osaka Bay	Sea bass	1,500
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	67
	Tottori Pref.	12	Nakaumi	Sea bass	13
	Hiroshima City	13	Hiroshima Bay	Sea bass	70
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	43
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	6.8
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	32
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	27
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(1.1)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	tr(2.5)
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	82
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	78
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[6-5] o,p'-DDT /wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 22/23 (Missing value : 0)
Detection Frequency (sample) : 22/23 (Missing value : 0)

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 3 \end{aligned}$

	stats
Geometric mean	22
Median	23
Maximum	2,000
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	20	32	tr(1)
Median	15	27	tr(1)
Maximum	250	2,000	tr(1)
Minimum	tr(2)	nd	tr(1)

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	15
	Yokohama City	2	Yokohama Port	Blue mussel	250
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(2)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	18
		2	Offshore of Kushiro	Chum salmon	9
	Iwate Pref.	3	Yamada Bay	Greenling	4
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	8
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	37
	Tokyo Met.	6	Tokyo Bay	Sea bass	2,000
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	1,700
	Nagoya City	8	Nagoya Port	Striped mullet	36
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	24
	Osaka Pref.	10	Osaka Bay	Sea bass	350
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	130
	Tottori Pref.	12	Nakaumi	Sea bass	23
	Hiroshima City	13	Hiroshima Bay	Sea bass	73
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	31
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	4
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	30
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	13
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	tr(1)
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	tr(1)
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	11
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	31
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

(Note 4) nd : Not detected

(Note 5) * : indicates the sum value of the Quantification [Detection] limits of each congener.

[6-6] o,p'-DDE /wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 22/23 (Missing value : 0)
Detection Frequency (sample) : 22/23 (Missing value : 0)

 $\begin{aligned} & Detection \ limit: 0.9 \\ & Quantification \ limit: 2.4 \end{aligned}$

	stats
Geometric mean	35
Median	33
Maximum	1,100
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	46	40	6.1
Median	27	39	6.8
Maximum	720	1,100	9.9
Minimum	4.9	nd	3.7

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	27
	Yokohama City	2	Yokohama Port	Blue mussel	720
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	4.9
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	27
		2	Offshore of Kushiro	Chum salmon	34
	Iwate Pref.	3	Yamada Bay	Greenling	11
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	22
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	76
	Tokyo Met.	6	Tokyo Bay	Sea bass	240
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	250
	Nagoya City	8	Nagoya Port	Striped mullet	44
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	59
	Osaka Pref.	10	Osaka Bay	Sea bass	1,100
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	150
	Tottori Pref.	12	Nakaumi	Sea bass	31
	Hiroshima City	13	Hiroshima Bay	Sea bass	100
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	71
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	4.6
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	33
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	12
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	9.9
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	3.7
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	17
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	110
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	tr(1.2)

(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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

[9] Toxaphenes /wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site): 9/23 (Missing value: 0) Detection Frequency (sample): 9/23 (Missing value: 0)

Detection limit: *50 Quantification limit: *140

	stats
Geometric mean	nd
Median	nd
Maximum	710
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	7/18	2/2
Detection Frequency (sample)	0/3	7/18	2/2
Geometric mean	nd	tr(50)	tr(60)
Median	nd	nd	tr(60)
Maximum	nd	710	tr(70)
Minimum	nd	nd	tr(60)

	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	650
		2	Offshore of Kushiro	Chum salmon	400
	Iwate Pref.	3	Yamada Bay	Greenling	tr(110)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	710
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	tr(80)
	Osaka Pref.	10	Osaka Bay	Sea bass	nd
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	tr(60)
	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)	Sea bass	tr(50)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	tr(70)
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	tr(60)
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	1,300
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	790
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

 $[9\text{-}1]\ 2\text{-}endo, 3\text{-}exo, 5\text{-}endo, 6\text{-}exo, 8, 8, 10, 10\text{-}octachlorobornane}\ (Parlar-26)\ \ /wildlife\ (pg/g\text{-}wet)$

Monitored year :2018

Detection Frequency (site) : 16/23 (Missing value : 0) Detection Frequency (sample) : 16/23 (Missing value : 0)

Detection limit: 8 Quantification limit: 21

	stats
Geometric mean	tr(18)
Median	tr(15)
Maximum	280
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	12/18	2/2
Detection Frequency (sample)	2/3	12/18	2/2
Geometric mean	tr(10)	tr(17)	53
Median	tr(15)	tr(17)	54
Maximum	tr(15)	280	54
Minimum	nd	nd	53

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(15)
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(15)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	280
		2	Offshore of Kushiro	Chum salmon	160
	Iwate Pref.	3	Yamada Bay	Greenling	47
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(14)
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	260
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(8)
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	40
	Osaka Pref.	10	Osaka Bay	Sea bass	tr(9)
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	25
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	22
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	tr(19)
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	tr(19)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	54
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	53
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	990
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	300
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

 $[9\text{-}2]\ 2\text{-}endo, 3\text{-}exo, 5\text{-}endo, 6\text{-}exo, 8, 8, 9, 10, 10\text{-}nonachlorobornane}\ (Parlar-50)\ / wildlife\ (pg/g-wet)$

Monitored year :2018

Detection Frequency (site) : 20/23 (Missing value : 0) Detection Frequency (sample) : 20/23 (Missing value : 0)

Detection limit : 6 Quantification limit : 16

	stats
Geometric mean	19
Median	17
Maximum	300
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	16/18	2/2
Detection Frequency (sample)	2/3	16/18	2/2
Geometric mean	tr(9)	22	tr(12)
Median	16	20	tr(12)
Maximum	17	300	tr(13)
Minimum	nd	nd	tr(11)

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	16
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	17
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	270
		2	Offshore of Kushiro	Chum salmon	180
	Iwate Pref.	3	Yamada Bay	Greenling	60
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(12)
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	300
	Tokyo Met.	6	Tokyo Bay	Sea bass	17
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	tr(6)
	Nagoya City	8	Nagoya Port	Striped mullet	tr(9)
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	36
	Osaka Pref.	10	Osaka Bay	Sea bass	18
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	30
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	22
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	22
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(7)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	28
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(8)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	tr(13)
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	tr(11)
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	300
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	490
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

 $\left[9\text{-}3\right]2,2,5,5,8,9,9,10,10\text{-}Nonachlorobornane}\left(Parlar\text{-}62\right)/wildlife\left(pg/g\text{-}wet\right)$

Monitored year :2018

Detection Frequency (site): 3/23 (Missing value: 0) Detection Frequency (sample): 3/23 (Missing value: 0)

Detection limit : 40 Quantification limit : 100

	stats
Geometric mean	nd
Median	nd
Maximum	150
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	3/18	0/2
Detection Frequency (sample)	0/3	3/18	0/2
Geometric mean	nd	nd	nd
Median	nd	nd	nd
Maximum	nd	150	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	100
		2	Offshore of Kushiro	Chum salmon	tr(60)
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	150
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

Monitored year :2018

Detection Frequency (site): 23/23 (Missing value: 0) Detection Frequency (sample): 23/23 (Missing value: 0) Detection limit: 0.5

Quantification limit: 1.4

	stats
Geometric mean	9.6
Median	9.2
Maximum	260
Minimum	1.8

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	4.9	8.2	110
Median	3.2	8.4	150
Maximum	20	70	260
Minimum	1.8	1.9	47

	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	3.2
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	70
		2	Offshore of Kushiro	Chum salmon	9.8
	Iwate Pref.	3	Yamada Bay	Greenling	10
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	6.0
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	14
	Tokyo Met.	6	Tokyo Bay	Sea bass	21
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	5.3
	Nagoya City	8	Nagoya Port	Striped mullet	1.9
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	16
	Osaka Pref.	10	Osaka Bay	Sea bass	6.4
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	10
	Tottori Pref.	12	Nakaumi	Sea bass	6.9
	Hiroshima City	13	Hiroshima Bay	Sea bass	9.2
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	2.8
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	3.5
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	14
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	7.5
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	3.7
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	47
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	260
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	2,500
	refer va		Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	3.6
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	920
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	1.6

[14] Polybromodiphenyl ethers(Br4~Br10)/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site): 12/23 (Missing value: 0) Detection Frequency (sample): 12/23 (Missing value: 0)

Detection limit: *130 Quantification limit: *360

	stats
Geometric mean	tr(190)
Median	tr(130)
Maximum	3,000
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(180)	2,100
Median	nd	tr(150)	2,300
Maximum	nd	800	3,000
Minimum	nd	nd	1,500

	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(130)
		2	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	760
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	540
	Nagoya City	8	Nagoya Port	Striped mullet	360
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	720
	Osaka Pref.	10	Osaka Bay	Sea bass	800
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	410
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(250)
	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)	Sea bass	420
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	1,500
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	3,000
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	120,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	tr(210)
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	41,000
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[14-1] Tetrabromodiphenyl ethers/wildlife (pg/g-wet)

Monitored year :2018

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

Detection limit : 5 Quantification limit : 14

	stats
Geometric mean	80
Median	68
Maximum	440
Minimum	tr(13)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	36	79	290
Median	26	61	300
Maximum	68	440	310
Minimum	26	tr(13)	280

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	26
	Yokohama City	2	Yokohama Port	Blue mussel	68
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	26
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	53
		2	Offshore of Kushiro	Chum salmon	tr(13)
	Iwate Pref.	3	Yamada Bay	Greenling	43
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	41
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	31
	Tokyo Met.	6	Tokyo Bay	Sea bass	440
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	430
	Nagoya City	8	Nagoya Port	Striped mullet	120
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	320
	Osaka Pref.	10	Osaka Bay	Sea bass	420
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	240
	Tottori Pref.	12	Nakaumi	Sea bass	28
	Hiroshima City	13	Hiroshima Bay	Sea bass	140
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	68
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	16
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	100
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	31
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	37
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	310
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	280
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	45,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	150
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	10,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	50

⁽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.

⁽Note 3) tr : detection limit value and more, less than Quantification limit value.

 $[14\text{-}1\text{-}1]\ 2,2',4,4'\text{-}Tetrabromodiphenyl ether (\#47)/wildlife (pg/g-wet)$

Monitored year :2018

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

Detection limit : 5 Quantification limit : 14

	stats
Geometric mean	53
Median	39
Maximum	320
Minimum	tr(10)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	21	53	230
Median	19	40	230
Maximum	39	320	260
Minimum	tr(13)	tr(10)	200

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(13)
	Yokohama City	2	Yokohama Port	Blue mussel	39
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	19
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	32
		2	Offshore of Kushiro	Chum salmon	tr(10)
	Iwate Pref.	3	Yamada Bay	Greenling	35
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	32
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	16
	Tokyo Met.	6	Tokyo Bay	Sea bass	320
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	270
	Nagoya City	8	Nagoya Port	Striped mullet	88
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	210
	Osaka Pref.	10	Osaka Bay	Sea bass	260
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	150
	Tottori Pref.	12	Nakaumi	Sea bass	16
	Hiroshima City	13	Hiroshima Bay	Sea bass	69
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	56
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(12)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	43
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	23
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	37
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	260
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	200
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	44,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	150
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	9,800
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	50

⁽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.

⁽Note 3) tr : detection limit value and more, less than Quantification limit value.

[14-2] Pentabromodiphenyl ethers/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 22/23 (Missing value : 0) Detection Frequency (sample) : 22/23 (Missing value : 0)

Detection limit : 4 Quantification limit : 11

	stats
Geometric mean	24
Median	23
Maximum	240
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	13	21	180
Median	21	21	190
Maximum	23	100	240
Minimum	tr(5)	nd	140

	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	23
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	21
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	25
		2	Offshore of Kushiro	Chum salmon	tr(5)
	Iwate Pref.	3	Yamada Bay	Greenling	17
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	18
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	13
	Tokyo Met.	6	Tokyo Bay	Sea bass	100
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	57
	Nagoya City	8	Nagoya Port	Striped mullet	23
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	80
	Osaka Pref.	10	Osaka Bay	Sea bass	100
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	53
	Tottori Pref.	12	Nakaumi	Sea bass	tr(9)
	Hiroshima City	13	Hiroshima Bay	Sea bass	30
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	13
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	40
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(9)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(8)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	140
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	240
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	23,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	32
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	5,800
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	tr(10)

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

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

Monitored year :2018

Detection Frequency (site): 13/23 (Missing value: 0) Detection Frequency (sample): 13/23 (Missing value: 0)

Detection limit : 4 Quantification limit : 11

	stats
Geometric mean	tr(5)
Median	tr(4)
Maximum	26
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(6)	nd	21
Median	tr(8)	nd	22
Maximum	15	26	22
Minimum	nd	nd	21

	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	tr(8)
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	tr(7)
		2	Offshore of Kushiro	Chum salmon	tr(4)
	Iwate Pref.	3	Yamada Bay	Greenling	tr(4)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(5)
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	tr(4)
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(7)
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	19
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	26
	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	22
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	21
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	1,600
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,000
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

(Note 4) nd: Not detected

(Note 5) * : indicates the sum value of the Quantification [Detection] limits of each congener.

[14-3] Hexabromodiphenyl ethers/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 21/23 (Missing value : 0)
Detection Frequency (sample) : 21/23 (Missing value : 0)

Detection limit: 8 Quantification limit: 21

	stats
Geometric mean	47
Median	47
Maximum	1,300
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(12)	44	650
Median	tr(12)	48	820
Maximum	34	190	1,300
Minimum	nd	nd	330

	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(12)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	34
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	47
		2	Offshore of Kushiro	Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	24
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	49
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	tr(18)
	Tokyo Met.	6	Tokyo Bay	Sea bass	170
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	46
	Nagoya City	8	Nagoya Port	Striped mullet	79
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	180
	Osaka Pref.	10	Osaka Bay	Sea bass	160
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	82
	Tottori Pref.	12	Nakaumi	Sea bass	tr(16)
	Hiroshima City	13	Hiroshima Bay	Sea bass	62
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	52
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	21
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	190
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	24
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(16)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	330
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	1,300
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	31,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	28
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	10,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	tr(14)

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[14-3-1] 2,2',4,4',5,5'-Pentabromodiphenyl ether (#153)/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site): 7/23 (Missing value: 0) Detection Frequency (sample): 7/23 (Missing value: 0)

Detection limit: 8 Quantification limit: 21

	stats
Geometric mean	nd
Median	nd
Maximum	190
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	5/18	2/2
Detection Frequency (sample)	0/3	5/18	2/2
Geometric mean	nd	nd	120
Median	nd	nd	140
Maximum	nd	24	190
Minimum	nd	nd	82

	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	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(9)
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	24
	Osaka Pref.	10	Osaka Bay	Sea bass	22
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	tr(8)
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(8)
	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	82
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	190
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	14,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	tr(8)
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	3,600
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[14-3-2] 2,2',4,4',5,6'-Pentabromodiphenyl ether (#154)/wildlife (pg/g-wet)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 20/23\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 20/23\ (Missing\ value: 0) \end{array}$

Detection limit : 5 Quantification limit : 14

	stats
Geometric mean	19
Median	16
Maximum	880
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	18	400
Median	nd	16	530
Maximum	tr(6)	77	880
Minimum	nd	nd	180

	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(6)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	25
		2	Offshore of Kushiro	Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	tr(12)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	16
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	tr(6)
	Tokyo Met.	6	Tokyo Bay	Sea bass	65
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	16
	Nagoya City	8	Nagoya Port	Striped mullet	22
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	69
	Osaka Pref.	10	Osaka Bay	Sea bass	61
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	31
	Tottori Pref.	12	Nakaumi	Sea bass	tr(8)
	Hiroshima City	13	Hiroshima Bay	Sea bass	24
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	14
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(7)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	77
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(10)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(8)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	180
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	880
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	13,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	tr(11)
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	4,100
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	tr(5)

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[14-4] Heptabromodiphenyl ethers/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 14/23 (Missing value : 0)
Detection Frequency (sample) : 14/23 (Missing value : 0)

Detection limit : 6 Quantification limit : 15

	stats
Geometric mean	tr(11)
Median	tr(9)
Maximum	480
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	11/18	2/2
Detection Frequency (sample)	1/3	11/18	2/2
Geometric mean	nd	tr(9)	230
Median	nd	tr(8)	300
Maximum	tr(10)	58	480
Minimum	nd	nd	110

	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(10)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(6)
		2	Offshore of Kushiro	Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(9)
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	29
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	tr(9)
	Nagoya City	8	Nagoya Port	Striped mullet	41
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	26
	Osaka Pref.	10	Osaka Bay	Sea bass	58
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	20
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(8)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	24
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	tr(11)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	110
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	480
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	12,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	6,800
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	tr(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[14.4-1]2,2',3,3',4,5',6'-Pentabromodiphenyl ether (#175)/wildlife (pg/g-wet) [14.4-2]2,2',3,4,4',5',6'-Pentabromodiphenyl ether (#183)/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site): 2/23 (Missing value: 0) Detection Frequency (sample): 2/23 (Missing value: 0)

Detection limit : 6 Quantification limit : 15

	stats
Geometric mean	nd
Median	nd
Maximum	36
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	0/18	2/2
Detection Frequency (sample)	0/3	0/18	2/2
Geometric mean	nd	nd	16
Median	nd	nd	22
Maximum	nd	nd	36
Minimum	nd	nd	tr(7)

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	#N/A	Yamada Bay	Blue mussel	#N/A
	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	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	tr(7)
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	36
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	540
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	310
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[14-5] Octabromodiphenyl ethers/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 10/23 (Missing value : 0)
Detection Frequency (sample) : 10/23 (Missing value : 0)

Detection limit : 6 Quantification limit : 16

	stats
Geometric mean	tr(8)
Median	nd
Maximum	580
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	8/18	2/2
Detection Frequency (sample)	0/3	8/18	2/2
Geometric mean	nd	tr(7)	190
Median	nd	nd	320
Maximum	nd	74	580
Minimum	nd	nd	61

	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	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	16
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	21
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	tr(9)
	Osaka Pref.	10	Osaka Bay	Sea bass	64
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	tr(11)
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(6)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	tr(9)
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	74
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	61
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	580
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	12,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	6,600
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[14-6] Nonabromodiphenyl ethers/wildlife (pg/g-wet)

Monitored year :2018

 $Detection\ Frequency\ (site): 2/23\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 2/23\ (Missing\ value: 0)$

Detection limit : 20 Quantification limit : 40

	stats
Geometric mean	nd
Median	nd
Maximum	53
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	0/18	2/2
Detection Frequency (sample)	0/3	0/18	2/2
Geometric mean	nd	nd	49
Median	nd	nd	50
Maximum	nd	nd	53
Minimum	nd	nd	46

	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	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	53
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	46
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	480
	refe Va		Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	430
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[14-7] Decabromodiphenyl ether/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site): 4/23 (Missing value: 0) Detection Frequency (sample): 4/23 (Missing value: 0)

Detection limit : 80 Quantification limit : 240

	stats
Geometric mean	nd
Median	nd
Maximum	500
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	2/18	2/2
Detection Frequency (sample)	0/3	2/18	2/2
Geometric mean	nd	nd	tr(210)
Median	nd	nd	300
Maximum	nd	tr(110)	500
Minimum	nd	nd	tr(90)

	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	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	tr(80)
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	tr(110)
	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	500
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	tr(90)
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	390
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	950
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[17] Pentachlorobenzene/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 20/23 (Missing value : 0)
Detection Frequency (sample) : 20/23 (Missing value : 0)

Detection limit : 5 Quantification limit : 15

	stats
Geometric mean	22
Median	27
Maximum	480
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	15/18	2/2
Detection Frequency (sample)	3/3	15/18	2/2
Geometric mean	tr(8)	19	370
Median	tr(7)	29	380
Maximum	tr(13)	70	480
Minimum	tr(5)	nd	280

	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	tr(7)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(13)
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	67
		2	Offshore of Kushiro	Chum salmon	38
	Iwate Pref.	3	Yamada Bay	Greenling	20
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(13)
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	37
	Tokyo Met.	6	Tokyo Bay	Sea bass	27
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	46
	Nagoya City	8	Nagoya Port	Striped mullet	70
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	60
	Osaka Pref.	10	Osaka Bay	Sea bass	47
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	31
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	18
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	30
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	tr(13)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(6)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	280
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	480
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	6,200
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	20
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	8,100
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	32

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

(Note 4) nd : Not detected

(Note 5) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[19] 1,2,5,6,9,10-Hexabromocyclododecanes/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site): 19/23 (Missing value: 0) Detection Frequency (sample): 19/23 (Missing value: 0)

Detection limit: *25 Quantification limit: *66

	stats
Geometric mean	120
Median	170
Maximum	660
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	99	600
Median	130	150	600
Maximum	310	660	610
Minimum	76	nd	590

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	76
	Yokohama City	2	Yokohama Port	Blue mussel	130
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	310
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	240
		2	Offshore of Kushiro	Chum salmon	tr(38)
	Iwate Pref.	3	Yamada Bay	Greenling	tr(64)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	200
	Tokyo Met.	6	Tokyo Bay	Sea bass	450
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	270
	Nagoya City	8	Nagoya Port	Striped mullet	130
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	510
	Osaka Pref.	10	Osaka Bay	Sea bass	660
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	460
	Tottori Pref.	12	Nakaumi	Sea bass	tr(33)
	Hiroshima City	13	Hiroshima Bay	Sea bass	260
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	78
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	170
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	590
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	610
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	39,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	160
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	30,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	170

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[19-1] α -1,2,5,6,9,10-Hexabromocyclododecane/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 22/23 (Missing value : 0)
Detection Frequency (sample) : 22/23 (Missing value : 0)

Detection limit : 9 Quantification limit : 23

	stats
Geometric mean	110
Median	160
Maximum	610
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	120	89	600
Median	88	140	600
Maximum	270	530	610
Minimum	76	nd	590

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	76
	Yokohama City	2	Yokohama Port	Blue mussel	88
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	270
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	240
		2	Offshore of Kushiro	Chum salmon	38
	Iwate Pref.	3	Yamada Bay	Greenling	64
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	23
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	190
	Tokyo Met.	6	Tokyo Bay	Sea bass	410
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	220
	Nagoya City	8	Nagoya Port	Striped mullet	110
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	480
	Osaka Pref.	10	Osaka Bay	Sea bass	530
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	430
	Tottori Pref.	12	Nakaumi	Sea bass	33
	Hiroshima City	13	Hiroshima Bay	Sea bass	250
	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)	Sea bass	160
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(9)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(13)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	590
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	610
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	39,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	160
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	30,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	170

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

 $\hbox{[19-2]}\ \beta\hbox{--}1,2,5,6,9,10-Hexabromocyclododecane/wildlife (pg/g-wet)}\\$

Monitored year :2018

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

Detection limit: 8 Quantification limit: 22

	stats
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	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	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

 $[19\text{-}3]\,\gamma\text{-}1,\!2,\!5,\!6,\!9,\!10\text{-}Hexabromocyclododecane/wildlife}\,(pg/g\text{-}wet)$

Monitored year :2018

Detection Frequency (site): 12/23 (Missing value: 0)
Detection Frequency (sample): 12/23 (Missing value: 0)

Detection limit: 8 Quantification limit: 21

	stats
Geometric mean	tr(11)
Median	tr(10)
Maximum	130
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	10/18	0/2
Detection Frequency (sample)	2/3	10/18	0/2
Geometric mean	tr(19)	tr(11)	nd
Median	39	tr(11)	nd
Maximum	46	130	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	46
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	39
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2	Offshore of Kushiro	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	Pacific saury	tr(11)
	Tokyo Met.	6	Tokyo Bay	Sea bass	44
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	48
	Nagoya City	8	Nagoya Port	Striped mullet	21
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	34
	Osaka Pref.	10	Osaka Bay	Sea bass	130
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	30
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(13)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	tr(13)
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	tr(10)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	260
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	260
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[20] Total Polychlorinated Naphthalenes/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 21/23 (Missing value : 0)
Detection Frequency (sample) : 21/23 (Missing value : 0)

Detection limit: *12 Quantification limit: *36

	stats
Geometric mean	50
Median	38
Maximum	700
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/18	2/2
Detection Frequency (sample)	3/3	16/18	2/2
Geometric mean	58	41	230
Median	tr(22)	36	240
Maximum	700	520	250
Minimum	tr(13)	nd	220

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(22)
	Yokohama City	2	Yokohama Port	Blue mussel	700
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(13)
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	tr(12)
		2	Offshore of Kushiro	Chum salmon	tr(15)
	Iwate Pref.	3	Yamada Bay	Greenling	tr(18)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	38
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	tr(34)
	Tokyo Met.	6	Tokyo Bay	Sea bass	180
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	380
	Nagoya City	8	Nagoya Port	Striped mullet	170
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	81
	Osaka Pref.	10	Osaka Bay	Sea bass	520
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	100
	Tottori Pref.	12	Nakaumi	Sea bass	tr(14)
	Hiroshima City	13	Hiroshima Bay	Sea bass	42
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	110
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(12)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(22)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	250
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	220
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	15,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	tr(16)
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	30,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	50

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[20-1] Monochloronaphthalenes/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site): 13/23 (Missing value: 0) Detection Frequency (sample): 13/23 (Missing value: 0)

 $\begin{aligned} & Detection \ limit: 3 \\ & Quantification \ limit: 9 \end{aligned}$

	stats
Geometric mean	tr(4)
Median	tr(3)
Maximum	69
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	11/18	0/2
Detection Frequency (sample)	2/3	11/18	0/2
Geometric mean	tr(4)	tr(4)	nd
Median	tr(6)	tr(4)	nd
Maximum	tr(7)	69	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(7)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(6)
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	tr(3)
		2	Offshore of Kushiro	Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	tr(4)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	tr(6)
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(4)
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	tr(8)
	Nagoya City	8	Nagoya Port	Striped mullet	25
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	69
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	14
	Tottori Pref.	12	Nakaumi	Sea bass	tr(3)
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(5)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	14
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	tr(3)
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	12
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[20-2] Dichloronaphthalenes/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 15/23 (Missing value : 0)
Detection Frequency (sample) : 15/23 (Missing value : 0)

 $\begin{aligned} & Detection \ limit: 2 \\ & Quantification \ limit: 5 \end{aligned}$

	stats
Geometric mean	tr(4)
Median	tr(3)
Maximum	56
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	13/18	0/2
Detection Frequency (sample)	2/3	13/18	0/2
Geometric mean	6	tr(4)	nd
Median	tr(3)	tr(4)	nd
Maximum	56	44	nd
Minimum	nd	nd	nd

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(3)
	Yokohama City	2	Yokohama Port	Blue mussel	56
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	tr(2)
		2	Offshore of Kushiro	Chum salmon	5
	Iwate Pref.	3	Yamada Bay	Greenling	tr(3)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(2)
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	6
	Tokyo Met.	6	Tokyo Bay	Sea bass	8
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	18
	Nagoya City	8	Nagoya Port	Striped mullet	19
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	tr(3)
	Osaka Pref.	10	Osaka Bay	Sea bass	44
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	15
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	7
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	14
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	tr(2)
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	tr(6)
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[20-3] Trichloronaphthalenes/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 18/23 (Missing value : 0) Detection Frequency (sample) : 18/23 (Missing value : 0)

 $\begin{aligned} & Detection \ limit: 2 \\ & Quantification \ limit: 5 \end{aligned}$

	stats
Geometric mean	tr(4)
Median	tr(2)
Maximum	160
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	13/18	2/2
Detection Frequency (sample)	3/3	13/18	2/2
Geometric mean	10	tr(4)	tr(4)
Median	tr(3)	tr(2)	tr(4)
Maximum	160	51	7
Minimum	tr(2)	nd	tr(2)

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(3)
	Yokohama City	2	Yokohama Port	Blue mussel	160
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(2)
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	nd
		2	Offshore of Kushiro	Chum salmon	tr(2)
	Iwate Pref.	3	Yamada Bay	Greenling	tr(2)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(2)
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	6
	Tokyo Met.	6	Tokyo Bay	Sea bass	15
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	43
	Nagoya City	8	Nagoya Port	Striped mullet	16
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	tr(2)
	Osaka Pref.	10	Osaka Bay	Sea bass	51
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	10
	Tottori Pref.	12	Nakaumi	Sea bass	nd
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(4)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	9
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	nd
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(2)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	7
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	tr(2)
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	47
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	150
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[20-4] Tetrachloronaphthalenes/wildlife (pg/g-wet)

Monitored year :2018

 $\begin{array}{l} Detection\ Frequency\ (site): 23/23\ (Missing\ value: 0) \\ Detection\ Frequency\ (sample): 23/23\ (Missing\ value: 0) \end{array}$

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 4 \end{aligned}$

	stats
Geometric mean	18
Median	12
Maximum	330
Minimum	tr(2)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	23	14	110
Median	12	12	110
Maximum	330	160	130
Minimum	tr(3)	tr(2)	87

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	12
	Yokohama City	2	Yokohama Port	Blue mussel	330
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(3)
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	tr(2)
		2	Offshore of Kushiro	Chum salmon	5
	Iwate Pref.	3	Yamada Bay	Greenling	4
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	12
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	11
	Tokyo Met.	6	Tokyo Bay	Sea bass	61
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	160
	Nagoya City	8	Nagoya Port	Striped mullet	68
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	29
	Osaka Pref.	10	Osaka Bay	Sea bass	160
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	31
	Tottori Pref.	12	Nakaumi	Sea bass	5
	Hiroshima City	13	Hiroshima Bay	Sea bass	12
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	42
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	5
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	tr(2)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	5
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	8
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	130
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	87
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	5,300
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	7
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	14,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	25

⁽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.

⁽Note 3) tr: detection limit value and more, less than Quantification limit value.

⁽Note 4) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[20-5] Pentachloronaphthalenes/wildlife (pg/g-wet)

Monitored year :2018

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

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 3 \end{aligned}$

	stats
Geometric mean	15
Median	12
Maximum	150
Minimum	tr(2)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	18/18	2/2
Detection Frequency (sample)	3/3	18/18	2/2
Geometric mean	10	14	92
Median	4	12	93
Maximum	130	150	93
Minimum	tr(2)	3	92

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	4
	Yokohama City	2	Yokohama Port	Blue mussel	130
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(2)
Fish	Hokkaido 1		Offshore of Kushiro	Rock greenling	4
		2	Offshore of Kushiro	Chum salmon	3
	Iwate Pref.	3	Yamada Bay	Greenling	4
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	17
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	4
	Tokyo Met.	6	Tokyo Bay	Sea bass	70
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	130
	Nagoya City	8	Nagoya Port	Striped mullet	39
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	40
	Osaka Pref.	10	Osaka Bay	Sea bass	150
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	26
	Tottori Pref.	12	Nakaumi	Sea bass	5
	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	4
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	3
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	6
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	11
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	93
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	92
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	8,200
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	8
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	11,000
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	18

⁽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.

⁽Note 3) tr : detection limit value and more, less than Quantification limit value.

[20-6] Hexachloronaphthalenes/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 20/23 (Missing value : 0)
Detection Frequency (sample) : 20/23 (Missing value : 0)

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 4 \end{aligned}$

	stats
Geometric mean	tr(3)
Median	tr(2)
Maximum	41
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)	tr(3)	26
Median	nd	tr(2)	28
Maximum	13	41	39
Minimum	nd	nd	17

	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	13
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(1)
		2	Offshore of Kushiro	Chum salmon	nd
	Iwate Pref.	3	Yamada Bay	Greenling	tr(1)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	5
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	tr(1)
	Tokyo Met.	6	Tokyo Bay	Sea bass	18
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	23
	Nagoya City	8	Nagoya Port	Striped mullet	5
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	7
	Osaka Pref.	10	Osaka Bay	Sea bass	41
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	4
	Tottori Pref.	12	Nakaumi	Sea bass	tr(1)
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(2)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	tr(3)
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(1)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	tr(1)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(1)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(1)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	17
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	39
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	1,800
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	tr(1)
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	4,400
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	7

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[20-7] Heptachloronaphthalenes/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site): 2/23 (Missing value: 0) Detection Frequency (sample): 2/23 (Missing value: 0)

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 3 \end{aligned}$

	stats
Geometric mean	nd
Median	nd
Maximum	tr(1)
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	1/18	0/2
Detection Frequency (sample)	1/3	1/18	0/2
Geometric mean	nd	nd	nd
Median	nd	nd	nd
Maximum	tr(1)	tr(1)	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(1)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	tr(1)
	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	4
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	230
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

(Note 4) nd: Not detected

(Note 5) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[20-8] Octachloronaphthalenes/wildlife (pg/g-wet)

Monitored year :2018

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

 $\begin{aligned} & Detection \ limit: 1 \\ & Quantification \ limit: 3 \end{aligned}$

	stats
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	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	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

[22] Pentachlorophenol and its salts and esters/wildlife (pg/g-wet)

Monitored year :2018

 $\begin{array}{ll} \mbox{Detection Frequency (site)}: 21/23 \mbox{ (Missing value}: 0) \\ \mbox{Detection Frequency (sample)}: 21/23 \mbox{ (Missing value}: 0) \\ \mbox{Detection limit}: *10 \\ \end{array}$

Detection limit: *10 Quantification limit: *40

	stats
Geometric mean	tr(30)
Median	tr(30)
Maximum	1,200
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/18	2/2
Detection Frequency (sample)	3/3	16/18	2/2
Geometric mean	tr(20)	tr(20)	490
Median	tr(20)	tr(20)	700
Maximum	50	140	1,200
Minimum	tr(10)	nd	200

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(20)
	Yokohama City	2	Yokohama Port	Blue mussel	50
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(10)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(10)
		2	Offshore of Kushiro	Chum salmon	40
	Iwate Pref.	3	Yamada Bay	Greenling	tr(20)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(10)
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	tr(20)
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(30)
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	tr(30)
	Nagoya City	8	Nagoya Port	Striped mullet	140
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	50
	Osaka Pref.	10	Osaka Bay	Sea bass	100
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	100
	Tottori Pref.	12	Nakaumi	Sea bass	tr(10)
	Hiroshima City	13	Hiroshima Bay	Sea bass	tr(10)
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	tr(20)
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(30)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	40
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	200
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	1,200
. [Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	14,000
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	110
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,100
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	tr(10)

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[22-1] Pentachlorophenol/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 18/23 (Missing value : 0) Detection Frequency (sample) : 18/23 (Missing value : 0)

 $\begin{aligned} & Detection\ limit: 10 \\ & Quantification\ limit: 30 \end{aligned}$

	stats
Geometric mean	tr(20)
Median	tr(20)
Maximum	1,200
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	13/18	2/2
Detection Frequency (sample)	3/3	13/18	2/2
Geometric mean	tr(20)	tr(10)	460
Median	tr(20)	tr(10)	690
Maximum	30	80	1,200
Minimum	tr(10)	nd	180

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(20)
	Yokohama City	2	Yokohama Port	Blue mussel	30
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(10)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(10)
		2	Offshore of Kushiro	Chum salmon	30
	Iwate Pref.	3	Yamada Bay	Greenling	tr(20)
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	tr(10)
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	tr(10)
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(10)
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	80
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	30
	Osaka Pref.	10	Osaka Bay	Sea bass	30
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	30
	Tottori Pref.	12	Nakaumi	Sea bass	tr(10)
	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	30
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	30
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	180
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	1,200
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	13,000
	ref		Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	110
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	910
		reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg white)	tr(10)

(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.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[22-2] Pentachloroanisole/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site) : 21/23 (Missing value : 0)
Detection Frequency (sample) : 21/23 (Missing value : 0)

 $\begin{aligned} & Detection \ limit: 2 \\ & Quantification \ limit: 6 \end{aligned}$

	stats
Geometric mean	8
Median	8
Maximum	73
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/18	2/2
Detection Frequency (sample)	3/3	16/18	2/2
Geometric mean	6	8	15
Median	tr(4)	7	16
Maximum	21	73	20
Minimum	tr(2)	nd	11

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(2)
	Yokohama City	2	Yokohama Port	Blue mussel	21
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(4)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(3)
		2	Offshore of Kushiro	Chum salmon	8
	Iwate Pref.	3	Yamada Bay	Greenling	nd
	Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	5	Offshore of Joban	Pacific saury	8
	Tokyo Met.	6	Tokyo Bay	Sea bass	21
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	29
	Nagoya City	8	Nagoya Port	Striped mullet	56
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	23
	Osaka Pref.	10	Osaka Bay	Sea bass	68
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	73
	Tottori Pref.	12	Nakaumi	Sea bass	tr(4)
	Hiroshima City	13	Hiroshima Bay	Sea bass	6
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	16
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(3)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	tr(2)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	tr(2)
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	tr(5)
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	20
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	11
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	530
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	tr(3)
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	230
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[23] Short-chain chlorinated paraffins/wildlife (pg/g-wet)

Monitored year :2018

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

Detection limit: *2,200 Quantification limit: *5,900

	stats
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	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	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

[23-1] Chlorinated decanes/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site): 4/23 (Missing value: 0)
Detection Frequency (sample): 4/23 (Missing value: 0)

Detection limit : 400 Quantification limit : 1,200

	stats
Geometric mean	nd
Median	nd
Maximum	tr(800)
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	1/18	1/2
Detection Frequency (sample)	2/3	1/18	1/2
Geometric mean	nd	nd	nd
Median	tr(400)	nd	tr(400)
Maximum	tr(400)	tr(800)	tr(600)
Minimum	nd	nd	nd

	Local communities	No	Monitored sites	Wildlife species	measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(400)
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(400)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	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)	Sea bass	tr(800)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	tr(600)
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[23-2] Chlorinated undecanes/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site): 1/23 (Missing value: 0)
Detection Frequency (sample): 1/23 (Missing value: 0)

Detection limit : 700 Quantification limit : 1,800

	stats
Geometric mean	nd
Median	nd
Maximum	tr(700)
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	1/18	0/2
Detection Frequency (sample)	0/3	1/18	0/2
Geometric mean	nd	nd	nd
Median	nd	nd	nd
Maximum	nd	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	nd
	Ishikawa Pref.		Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	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)	Sea bass	tr(700)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[23-3] Chlorinated dodecanes/wildlife (pg/g-wet)

Monitored year :2018

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

Detection limit : 600 Quantification limit : 1,500

	stats
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	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.		Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

[23-4] Chlorinated tridecanes/wildlife (pg/g-wet)

Monitored year :2018

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

Detection limit : 500 Quantification limit : 1,400

	stats
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	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	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	nd
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	nd
	Nagoya City	8	Nagoya Port	Striped mullet	nd
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	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)	Sea bass	nd
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	tr(2,600)
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[24] Dicofol/wildlife (pg/g-wet)

Monitored year :2018

Detection Frequency (site): 10/23 (Missing value: 0)
Detection Frequency (sample): 10/23 (Missing value: 0)

Detection limit: 10 Quantification limit: 30

	stats
Geometric mean	tr(10)
Median	nd
Maximum	280
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	9/18	0/2
Detection Frequency (sample)	1/3	9/18	0/2
Geometric mean	nd	tr(10)	nd
Median	nd	nd	nd
Maximum	30	280	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	30
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
		2	Offshore of Kushiro	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	Pacific saury	nd
	Tokyo Met.	6	Tokyo Bay	Sea bass	tr(10)
	Kawasaki City	7	Offshore of Ogishima Island, Port of Kawasaki	Sea bass	50
	Nagoya City	8	Nagoya Port	Striped mullet	280
	Shiga Pref.	9	Lake Biwa, Riv. Ado (Takashima City)	Dace	nd
	Osaka Pref.	10	Osaka Bay	Sea bass	60
	Hyogo Pref.	11	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	12	Nakaumi	Sea bass	tr(20)
	Hiroshima City	13	Hiroshima Bay	Sea bass	nd
	Kagawa Pref.	14	Takamatsu Port	Striped mullet	50
	Kochi Pref.	15	Mouth of Riv. Shimanto (Shimanto City)	Sea bass	tr(10)
	Oita Pref.	16	Mouth of Riv. Oita (Oita City)	Sea bass	tr(10)
	Kagoshima Pref.	17	West Coast of Satsuma Peninsula	Sea bass	30
	Okinawa Pref.	18	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Shiga Pref.	1	Lake Biwa (Lake Kita, offshore of Tikubushima Island)	Great Cormorant	nd
	Tottori Pref.	2	Riv.Tenjin (Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Shimosone-bashi Bridge, Riv. Fuefuki (Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	reference value	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		reference value	Koya Pond (Itami City)	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 2) Data treated as detected means detection limit value and more.

(Note 3) tr: detection limit value and more, less than Quantification limit value.

[1] Total Polychlorinated biphenyls (Total PCBs)/air (pg/m3)

Monitored year :2018

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

Detection limit: *0.8 Quantification limit: *2.4

	stats
Geometric mean	110
Median	100
Maximum	750
Minimum	20

Local communities	N-	Monitored sites	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	53	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	33	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	38	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	78	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	58	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	69	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	89	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	210	MV
	9	Chichijima Island	10/7 ~ 10/14	59	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	130	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	400	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	100	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	240	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	57	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	120	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	110	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	97	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	160	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	53	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	510	HV

Local communities	No	Monitored sites	Warm	Air sampler	
	110		Sampling dates	measured value	An samplet
Osaka Pref. 21	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
		(Osaka City)	9/12 ~ 9/13	280	HV
	(Osaka City)	9/13 ~ 9/14			
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	160	HV
11,0501161.		Tryogo Trefecturus Environmentus Tesseuren center (11666 city)	9/28 ~ 9/29	100	11 V
K I C'	22	W. L. Civ. C	10/2 ~ 10/3	750	1117
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	750	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	140	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	22	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	210	HV
imosiiiiia City	20	Throsinna City Kokutaiji Junioi Trigii School (Tinosiillia City)		210	11 V
			9/20 ~ 9/21		
	_	Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		210	MV
		(Tumuguem enj)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		240	MV
		, , ,			
		+	9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11	HV	
TOKUSIIIIIa TTET.	23	Environmental Sciences Center (Tokushima City)		170	п٧
			9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	0 Kagawa Prefectural Public Swimming Pool (Takamatsu City)		88	MV
		31 Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		HV
Ehime Pref.	31		9/4 ~ 9/5	180	
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	260	HV
i ukuoka i ici.	32	Omata City Government Building (Omata City)	9/12 ~ 9/13	200	111
	22		9/11 ~ 9/18	0.4	207
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		94	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	52	HV
		Science (Out City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	,,11 ,,13	32	MV
,	23	(Miyazaki City)			141 4
			0/05 0/06		
** 1. * .	36	Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City)	9/25 ~ 9/26	42	
Kagoshima Pref.			9/26 ~ 9/27	42	HV
			9/27 ~ 9/28		
		37 Cape Hedo (Kunigami Village)	8/27 ~ 8/28		
Okinawa Pref.	37		8/28 ~ 8/29	20	HV
			8/29 ~ 8/30		
		(-ie-) :- hd dh	-:4/4h		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) \ast : indicates the sum value of the Quantification [Detection] limits of each congener.

[1-1] Monochlorobiphenyls/air (pg/m3)

Monitored year :2018

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

Detection limit : 0.03 Quantification limit : 0.09

	stats
Geometric mean	8.9
Median	10
Maximum	49
Minimum	1.4

I1iti	M-	Manitana Laitan	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	8.2	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	2.9	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	4.2	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	5.7	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	6.7	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	13	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	16	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	13	MV
	9	Chichijima Island	10/7 ~ 10/14	1.5	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	11	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	15	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	12	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	18	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	5.4	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	8.5	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	7.1	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	15	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	8.7	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	18	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	11	HV

Local communities	No	Monitored sites	Warm season		Air sampler
Local communities	110		Sampling dates	measured value	7 th sumpler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	9.5	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	7.2	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	12	HV
noce only	23	Those only dovernment Bunding (11660 only)	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	10	HV
Naia Fiei.	24	Tellit Ali Quanty Monitoring Station (Tellit City)		10	пу
			9/20 ~ 9/21		
			9/25 ~ 9/26		****
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	1.4	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	26 Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	14	HV
			9/20 ~ 9/21		
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		44	MV
· ·		(Yamaguchi City)			
			8/21 ~ 8/28		
	Hagi Health and Welfare Center (Hagi City)	0/21 0/20	49	MV	
				42	141 4
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)		10	HV
i okusnima Prei.			9/11 ~ 9/12	10	пv
			9/12 ~ 9/13		
	30	0 Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17		
Kagawa Pref.				14	MV
	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.			9/4 ~ 9/5	15	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	11	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		7.7	MV
	33	33 Baga Fretectara Environmental Research Center (Baga City)			171 7
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	8.5	HV
	5-	Science (Udo City)	10/3 ~ 10/4	0.0	111
Minnest D. C	25	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	2.2	3.437
Miyazaki Pref.	35	(Miyazaki City)		3.2	MV
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	4.9	HV
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	3.4	HV
			8/29 ~ 8/30		
			-:4/4		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[1-2] Dichlorobiphenyls/air (pg/m3)

Monitored year :2018

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

Detection limit: 0.3 Quantification limit: 0.8

	stats
Geometric mean	32
Median	29
Maximum	220
Minimum	7.1

T 1 22	N	W 5 15	Warm	season	A: 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	20	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	9.4	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	15	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	32	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	20	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	20	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	25	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	57	MV
	9	Chichijima Island	10/7 ~ 10/14	27	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	39	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	220	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	28	н٧
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	81	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	23	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	41	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	27	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	27	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	50	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	13	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	93	HV

Local communities	No	Monitored sites		season	Air sampler
Local communices	110	Montored sites	Sampling dates	measured value	7 m sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	(Osaka City)	9/12 ~ 9/13	65	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	35	HV
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	110	HV
,		, ,,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	49	HV
runu r ren.	2-1	Tem 7 in Quanty Monitoring Station (Tem City)	9/20 ~ 9/21	72	111
Shimane Pref.	25	Obi National Asid Bair Observatory (Obinashima Taum)	9/25 ~ 9/26	7.1	1117
Shimane Prei.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	7.1	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	48	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		62	MV
		(Tamagucin City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		69	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	41	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 10/17	25	MV
Ruguwa 1 Ici.	30	Tangawa Protecturar Public Swimming 1 507 (Takamatsu City)		23	
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	66	HV
Elline Frei.	31			00	HV
			9/5 ~ 9/6		
F. I. B. C	22		9/10 ~ 9/11	40	****
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	40	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		29	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	14	HV
		Science (out ony)	10/3 ~ 10/4		
		ME TO CALL STATE DATE HAVE TO SE	9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment		14	MV
		(Miyazaki City)			
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	13	HV
	50	Health (Kagoshima City)	9/27 ~ 9/28	"	** '
		+	8/27 ~ 8/28	+	
Okinawa Pref.	37	Cana Hado (Kunigami Villaga)		8.4	HV
Okinawa Prei.	3/	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	8.4	HV
			8/29 ~ 8/30		

(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.

[1-3] Trichlorobiphenyls/air (pg/m3)

Monitored year :2018

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

Detection limit : 0.1 Quantification limit : 0.3

	stats
Geometric mean	28
Median	30
Maximum	310
Minimum	4.5

Local communities	No	o Monitored sites	Warm season		Air sampler
Local communities	NO	Momitored sites	Sampling dates	measured value	Air sampier
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	14	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	6.7	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	9.2	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	20	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	14	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	20	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	24	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	63	MV
	9	Chichijima Island	10/7 ~ 10/14	19	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	37	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	68	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	34	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	77	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	15	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	24	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	30	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	28	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	51	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	9.2	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	280	HV

Local communities	No	Monitored sites		season	Air sampler
Local communices	110	Monitored sites	Sampling dates	measured value	7 m sampler
		Oraba Jaint Burfastonal Community Building Building 2 Assess	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	92	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	48	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	310	HV
•		3,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	33	HV
runa rici.	2-7	Temi 7 in Quanty Monitoring Station (Temi City)	9/20 ~ 9/21	33	111
Shimane Pref.	25	Oli National Asid Bain Observatory (Obinashina Tanan)	9/25 ~ 9/26	6.9	HV
Sililiane Fier.	23	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.9	п٧
			9/27 ~ 9/28		
TT: 1: C:	2.5	We do not be a second of the s	9/18 ~ 9/19	4.5	****
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	46	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		61	MV
		(Tuninguoni Ony)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		70	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	48	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		21	MV
		g			
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	31	HV
Ellillic I Ici.			9/5 ~ 9/6	31	нv
			9/10 ~ 9/11		
Fukuoka Pref.	32	Ot- City C		43	1117
гикиока Ргет.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	43	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		30	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	15	HV
		(540 54)	10/3 ~ 10/4		
		Miverals Profestural Institute for Public Healthand Erginners	9/11 ~ 9/18		<u> </u>
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment		6.7	MV
		(Miyazaki City)			
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	9.5	HV
		Health (Kagoshima City)	9/27 ~ 9/28		
			8/27 ~ 8/28	+	
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	4.5	HV
OKIIIawa I ICI.	31	Cape Head (Kumgaim v mage)	8/28 ~ 8/29	7.3	11 V
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[1-4] Tetrachlorobiphenyls/air (pg/m3)

Monitored year :2018

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

Detection limit : 0.1 Quantification limit : 0.4

	stats
Geometric mean	18
Median	17
Maximum	230
Minimum	2.3

I1iti	M-	Manitana Laitan	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	6.6	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	6.2	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	5.5	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	12	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	8.4	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	11	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	15	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	46	MV
	9	Chichijima Island	10/7 ~ 10/14	7.9	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	25	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	55	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	17	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	35	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	8.4	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	21	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	25	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	17	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	31	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	6.4	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	97	HV

Local communities	No	Monitored sites	Warm	season	Air sampler
zoea. communities	110		Sampling dates	measured value	7 in sumplei
		Only List Bufset and Comment Building Building 2 Americ	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	62	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	44	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	230	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	25	HV
Nara 1 ICI.	24	Tenii An Quanty Monitoring Station (Tenii City)		23	11 V
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	3.7	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	47	HV
			9/20 ~ 9/21		
		W. LID C. IV. C. CDIV. W. Id. IF	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		32	MV
_		(Yamaguchi City)			
•			8/21 ~ 8/28		
	Hagi Health and Welfare Center (Hagi City)	0.20	41	MV	
		Thag I round and Woman Contor (Ingl City)			,
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	. 35	HV
Tokusiiiiia Tiet.				33	** '
			9/12 ~ 9/13		
	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17		
Kagawa Pref.				15	MV
	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	24	
Ehime Pref.			9/4 ~ 9/5		HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		HV
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	41	
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		17	MV
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	9.6	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	7/11 7/10	4.6	MV
iviiyazaki i ici.	33	(Miyazaki City)		4.0	1V1 V
			0/25 - 0/25		
W 1: B 6	2-	Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	7.5	****
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	7.5	HV
		- "	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	37 Cape Hedo (Kunigami Village)	8/28 ~ 8/29	2.3	HV
Okinawa Pref.	31	Cape riedo (Kuniganii Vinage)	0/20 0/27	2.3	** '

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[1-4-1] 3,3',4,4'-Tetrachlorobiphenyl (#77)/air (pg/m3)

Monitored year :2018

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

Detection limit : 0.009 Quantification limit : 0.024

	stats
Geometric mean	0.10
Median	0.12
Maximum	0.45
Minimum	tr(0.012)

T1	N-	Monitored sites	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.032	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.16	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.030	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.072	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.060	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.076	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.075	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.22	MV
	9	Chichijima Island	10/7 ~ 10/14	0.066	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.14	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.25	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.11	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.22	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.043	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.16	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.15	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.096	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.22	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.046	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.21	HV

Local communitie	
Local communities	
Osaka Pref.	
	Hyogo Pref.
, , , , , , , , , , , , , , , , , , , ,	
Kobe City	
Nara Pref.	
runu r ici.	
Shimane Pref.	
Sililiale Fiel.	
TT: 1: 0:	
Hiroshima City	
Yamaguchi Pref	
Tokushima Pref	
Kagawa Pref.	
C	
Ehime Pref.	
Fukuoka Pref	
i ukuoka i ici.	
Saga Prof	
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V D. C	
Kumamoto Prei	
Miyazaki Pref.	
Kagoshima Pref	
Okinawa Pref.	
Ehime Pref. Fukuoka Pref. Saga Pref. Kumamoto Pref Miyazaki Pref. Kagoshima Pref	

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

[1-4-2] 3,4,4',5-Tetrachlorobiphenyl (#81)/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 17/37 (Missing value: 0)
Detection Frequency (sample): 17/37 (Missing value: 0)

Detection limit: 0.009 Quantification limit: 0.023

	stats
Geometric mean	nd
Median	nd
Maximum	0.030
Minimum	nd

I1iti	N-	Maritana daisa	Warm	season	A :1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(0.011)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	tr(0.014)	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.011)	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	tr(0.013)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.012)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.030	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	tr(0.010)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	tr(0.010)	HV

v v v		o Monitored sites	Warm	A : 1	
Local communities	No		Sampling dates	measured value	Air sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	tr(0.019)	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	tr(0.010)	HV
, ,			9/28 ~ 9/29	, ,	
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	tr(0.021)	HV
,			10/4 ~ 10/5	, ,	
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	tr(0.010)	HV
		, , , , , , , , , , , , , , , , , , ,	9/20 ~ 9/21	. (
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Similate 1 ter.	23	Oki National Field Rain Observatory (Okinosinina Town)	9/27 ~ 9/28	nu	117
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	tr(0.017)	HV
Tillosillila City	20	Throshinia City Rokutaiji Junioi Trigii School (Throshinia City)	9/20 ~ 9/21	u(0.017)	11 V
v un c	27	Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28	. (0.011)	MV
Yamaguchi Pref.	21	(Yamaguchi City)		tr(0.011)	MV
			0.01		
	20	W. W. M. D. D. W. M. C.	8/21 ~ 8/28	(0.010)	207
	28	Hagi Health and Welfare Center (Hagi City)		tr(0.010)	MV
	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/10 ~ 9/11	nd	
Tokushima Pref.			9/11 ~ 9/12		HV
		·	9/12 ~ 9/13		
		Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17	nd	
Kagawa Pref.	30				MV
			0/2 0/4		
El: D C	21	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	,	IIV
Ehime Pref.	31		9/4 ~ 9/5	nd	HV
			9/5 ~ 9/6		
F	22	0 . (0 . (0 (0 (0 (0 (0 (0	9/10 ~ 9/11	,	****
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	nd	HV
			9/12 ~ 9/13		
a	22		9/11 ~ 9/18	. (0.000)	207
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		tr(0.009)	MV
			10/1 10/2		
. D. 2	2.4	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	. (0.012)	****
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	tr(0.012)	HV
		·	10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	(Miyazaki City)		nd	MV
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[1-5] Pentachlorobiphenyls/air (pg/m3)

Monitored year :2018

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

Detection limit : 0.1 Quantification limit : 0.3

	stats
Geometric mean	8.6
Median	8.9
Maximum	67
Minimum	0.6

T 1 22	N	W 5 15	Warm	season	A. 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	2.9	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	5.8	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	2.9	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	6.0	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	5.3	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	3.8	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	6.5	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	21	MV
	9	Chichijima Island	10/7 ~ 10/14	2.5	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	13	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	33	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	7.7	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	17	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	3.6	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	16	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	13	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	6.5	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	15	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	3.7	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	20	HV

Osaka Pref. 21 Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City) 9/11 - 9/12 9/12 - 9/13 9/13 - 9/14 9/12 - 9/13 9/13 - 9/14 Hyogo Pref. 22 Hyogo Prefectural Environmental Research Center (Kobe City) 9/26 - 9/27 9/28 9/28 - 9/29 9/28 - 9/29 Kobe City 23 Kobe City Government Building (Kobe City) 10/2 - 10/3 10/4 10/4 - 10/5 Nara Pref. 24 Tenri Air Quality Monitoring Station (Tenri City) 9/18 - 9/19 9/19 - 9/20 9/20 - 9/21 Shimane Pref. 25 Oki National Acid Rain Observatory (Okinoshima Town) 9/26 - 9/27 9/27 - 9/28 Hiroshima City 26 Hiroshima City Kokutaiji Junior High School (Hiroshima City) 9/18 - 9/19 9/19 - 9/20 9/20 - 9/21 Yamaguchi Pref. 27 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) 8/21 - 8/28	sured value 36	Air sampler
Osaka Pref. 21 Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City) 9/12 ~ 9/13 Hyogo Pref. 22 Hyogo Prefectural Environmental Research Center (Kobe City) 9/26 ~ 9/27 Kobe City 9/27 ~ 9/28 9/28 ~ 9/29 Kobe City 10/2 ~ 10/3 Nara Pref. 23 Kobe City Government Building (Kobe City) 10/3 ~ 10/4 Nara Pref. 24 Tenri Air Quality Monitoring Station (Tenri City) 9/18 ~ 9/19 Shimane Pref. 25 Oki National Acid Rain Observatory (Okinoshima Town) 9/26 ~ 9/27 Hiroshima City 26 Hiroshima City Kokutaiji Junior High School (Hiroshima City) 9/19 ~ 9/20 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) 8/21 ~ 8/28 28 Hagi Health and Welfare Center (Hagi City) 8/21 ~ 8/28		HV
Osaka Pref. 21 (Osaka City) 9/12 ~ 9/13 9/13 ~ 9/14 9/13 ~ 9/14 9/13 ~ 9/14 9/16 ~ 9/27 9/26 ~ 9/27 9/26 ~ 9/27 9/27 ~ 9/28 9/28 ~ 9/29 10/2 ~ 10/3 10/2 ~ 10/3 10/2 ~ 10/3 10/4 ~ 10/5 10/4 ~ 1		HV
Hyogo Pref. 22 Hyogo Prefectural Environmental Research Center (Kobe City) 9/26 ~ 9/27		
Hyogo Pref.22Hyogo Prefectural Environmental Research Center (Kobe City) $9/27 \sim 9/28$ $9/28 \sim 9/29$ Kobe City23Kobe City Government Building (Kobe City) $10/2 \sim 10/3$ $10/3 \sim 10/4$ $10/4 \sim 10/5$ Nara Pref.24Tenri Air Quality Monitoring Station (Tenri City) $9/18 \sim 9/19$ $9/19 \sim 9/20$ Shimane Pref.25Oki National Acid Rain Observatory (Okinoshima Town) $9/25 \sim 9/26$ $9/27 \sim 9/28$ Hiroshima City26Hiroshima City Kokutaiji Junior High School (Hiroshima City) $9/19 \sim 9/20$ $9/20 \sim 9/21$ Yamaguchi Pref.27Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) $8/21 \sim 8/28$ 28Hagi Health and Welfare Center (Hagi City) $8/21 \sim 8/28$		
Kobe City 23 Kobe City Government Building (Kobe City) 10/2 ~ 10/3 10/3 ~ 10/4 10/4 ~ 10/5 9/18 ~ 9/19 Nara Pref. 24 Tenri Air Quality Monitoring Station (Tenri City) 9/19 ~ 9/20 9/20 ~ 9/21 Shimane Pref. 25 Oki National Acid Rain Observatory (Okinoshima Town) 9/18 ~ 9/19 9/26 ~ 9/27 9/27 ~ 9/28 9/18 ~ 9/19 19/26 ~ 9/27 9/27 ~ 9/28 9/18 ~ 9/19 9/18 ~ 9/19 9/18 ~ 9/19 9/18 ~ 9/19 9/18 ~ 9/19 9/18 ~ 9/19 9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21 Yamaguchi Pref. 27 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) 8/21 ~ 8/28 Hagi Health and Welfare Center (Hagi City)		
Kobe City 23 Kobe City Government Building (Kobe City)	15	HV
Kobe City 23 Kobe City Government Building (Kobe City)		
Kobe City Kobe City Government Building (Kobe City) $10/3 \sim 10/4$ $10/4 \sim 10/5$ $9/18 \sim 9/19$ $9/19 \sim 9/20$ $9/20 \sim 9/21$ Shimane Pref. Shimane Pref. Coki National Acid Rain Observatory (Okinoshima Town) Final Acid Rain Observatory (Okinoshima Town) F		
Nara Pref. 24 Tenri Air Quality Monitoring Station (Tenri City) $\begin{array}{c} 9/18 \sim 9/19 \\ 9/19 \sim 9/20 \\ 9/20 \sim 9/21 \\ 9/25 \sim 9/26 \\ 9/27 \sim 9/28 \\ 9/27 \sim 9/28 \\ 9/27 \sim 9/28 \\ 9/18 \sim 9/19 \\ 9/27 \sim 9/28 \\ 9/18 \sim 9/19 \\ 9/19 \sim 9/20 \\ 9/27 \sim 9/21 \\ 9/27 \sim 9/28 \\ 9/18 \sim 9/19 \\ 9/19 \sim 9/20 \\ 9/20 \sim 9/21 \\ 9$	67	HV
Nara Pref. 24 Tenri Air Quality Monitoring Station (Tenri City)	-	
Nara Pref. 24 Tenri Air Quality Monitoring Station (Tenri City) $9/19 \sim 9/20$ $9/20 \sim 9/21$ $9/25 \sim 9/26$ $9/26 \sim 9/27$ $9/27 \sim 9/28$ Shimane Pref. 25 Oki National Acid Rain Observatory (Okinoshima Town) $9/19 \sim 9/26$ $9/26 \sim 9/27$ $9/27 \sim 9/28$ Hiroshima City 26 Hiroshima City Kokutaiji Junior High School (Hiroshima City) $9/19 \sim 9/20$ $9/18 \sim 9/19$ $9/19 \sim 9/20$ $9/20 \sim 9/21$ $9/20 \sim 9/21$ $9/20 \sim 9/21$ $8/21 \sim 8/28$ Yamaguchi Pref. 27 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) $8/21 \sim 8/28$		
Shimane Pref. 25 Oki National Acid Rain Observatory (Okinoshima Town) $\begin{array}{c} 9/20 \sim 9/21 \\ 9/25 \sim 9/26 \\ 9/26 \sim 9/27 \\ 9/27 \sim 9/28 \\ 9/18 \sim 9/19 \\ 9/19 \sim 9/20 \\ 9/20 \sim 9/21 \\ \end{array}$ Hiroshima City 26 Hiroshima City Kokutaiji Junior High School (Hiroshima City) $\begin{array}{c} 9/18 \sim 9/19 \\ 9/19 \sim 9/20 \\ 9/20 \sim 9/21 \\ 8/21 \sim 8/28 \\ \end{array}$ Yamaguchi Pref. 27 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) $\begin{array}{c} 8/21 \sim 8/28 \\ 8/21 \sim 8/28 \\ \end{array}$	15	HV
Shimane Pref. 25 Oki National Acid Rain Observatory (Okinoshima Town)	13	11 7
Shimane Pref. 25 Oki National Acid Rain Observatory (Okinoshima Town)		
Hiroshima City 26 Hiroshima City Kokutaiji Junior High School (Hiroshima City) 9/18 ~ 9/19 $9/18 \sim 9/19 \sim 9/20 \sim 9/21$ Yamaguchi Pref. 27 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) 8/21 ~ 8/28 Hagi Health and Welfare Center (Hagi City) 8/21 ~ 8/28	1.7	HV
Hiroshima City 26 Hiroshima City Kokutaiji Junior High School (Hiroshima City) 9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21 Yamaguchi Pref. 27 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) 8/21 ~ 8/28 Hagi Health and Welfare Center (Hagi City)	1.7	пу
Hiroshima City 26 Hiroshima City Kokutaiji Junior High School (Hiroshima City) $9/19 \sim 9/20$ $9/20 \sim 9/21$ Yamaguchi Pref. 27 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) $8/21 \sim 8/28$ $28 \text{ Hagi Health and Welfare Center (Hagi City)}$		
Yamaguchi Pref. 27 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	42	****
Yamaguchi Pref. 27 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) 8/21 ~ 8/28 8/21 ~ 8/28 Hagi Health and Welfare Center (Hagi City)	43	HV
Yamaguchi Pref. 27 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) 28 Hagi Health and Welfare Center (Hagi City)		
Yamaguchi Pret. (Yamaguchi City) 28 Hagi Health and Welfare Center (Hagi City) 8/21 ~ 8/28		
28 Hagi Health and Welfare Center (Hagi City)	11	MV
28 Hagi Health and Welfare Center (Hagi City)		
	11	MV
9/10 ~ 9/11		
Tokushima Pref. 29 Tokushima Prefectural Public Health, Pharmaceutical and 9/11 ~ 9/12	21	HV
Environmental Sciences Center (Tokushima City) $\frac{9/11 - 9/12}{9/12 \sim 9/13}$		
10/10 ~ 10/17		
Kagawa Pref. 30 Kagawa Prefectural Public Swimming Pool (Takamatsu City)	8.9	MV
9/3 ~ 9/4		
Ehime Pref. 31 Ehime Prefectural Government Nanyo Regional Office (Uwajima City) 9/4 ~ 9/5	19	HV
9/5 ~ 9/6		
9/10 ~ 9/11		
Fukuoka Pref. 32 Omuta City Government Building (Omuta City) 9/11 ~ 9/12	30	HV
9/12 ~ 9/13	30	11 V
9/12 9/13		
Saga Pref. 33 Saga Prefectural Environmental Research Center (Saga City)	7.0	MV
Saga Fier. Saga Fierecturai Environmentai Research Center (Saga City)	7.0	IVI V
101/2 10/2		
Kumamoto Prefectural Institute of Public Health and Environmental	2.4	****
Kumamoto Pref. 34 Science (Udo City) 10/2 ~ 10/3	3.4	HV
10/3 ~ 10/4		
Miyazaki Prefectural Institute for Public Healthand Environment		
Miyazaki Pref. 35 (Miyazaki City)	2.1	MV
Kagoshima Prefectural Institute for Environmental Research and Public Yes 1. D. G. Kagoshima Prefectural Institute for Environmental Research and Public		
Kagoshima Pref. 36 Kagoshima Prefecturar institute for Environmental Research and Public 9/26 ~ 9/27 Health (Kagoshima City)		HV
9/27 ~ 9/28	3.9	
8/27 ~ 8/28	3.9	
Okinawa Pref. 37 Cape Hedo (Kunigami Village) 8/28 ~ 8/29	3.9	
8/29 ~ 8/30	0.6	HV
8/29 ~ 8/30		HV

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

[1-5-1] 2,3,3',4,4'-Pentachlorobiphenyl (#105)/air (pg/m3)

Monitored year :2018

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

Detection limit : 0.02 Quantification limit : 0.05

	stats
Geometric mean	0.23
Median	0.22
Maximum	1.5
Minimum	tr(0.02)

I1iti	NI.	Maritana daikan	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.06	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.11	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.06	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.15	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.12	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.11	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.15	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.59	MV
	9	Chichijima Island	10/7 ~ 10/14	0.13	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.36	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.96	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.21	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.54	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.08	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.33	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.38	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.17	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.63	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.08	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.46	HV

Local communities	No	No Monitored sites	Warm season		Air sampler	
Local communities	110		Sampling dates	measured value	An sampler	
			9/11 ~ 9/12			
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	1.1	HV	
		(Osaka City)	9/13 ~ 9/14			
			9/26 ~ 9/27			
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.41	HV	
Hyogo Hen.		Tryogo Perceturu Environmentar Research Center (Robe City)	9/28 ~ 9/29	0.41	11.	
W 1 G':	22	W. L. Ch. C	10/2 ~ 10/3	1.5	****	
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	1.5	HV	
			10/4 ~ 10/5			
			9/18 ~ 9/19			
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.37	HV	
			9/20 ~ 9/21			
			9/25 ~ 9/26			
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.05	HV	
		, , , , , , , , , , , , , , , , , , , ,	9/27 ~ 9/28			
			9/18 ~ 9/19			
Him drive Cite	26	Himshims City Valuatiii Issias High Cahaal (Himshims City)		1.0	HV	
Hiroshima City	20	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	1.0	нv	
			9/20 ~ 9/21			
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28			
Yamaguchi Pref.	27	(Yamaguchi City)		0.56	MV	
		(Tamagucin City)				
			8/21 ~ 8/28			
	28	Hagi Health and Welfare Center (Hagi City)		0.52	MV	
			9/10 ~ 9/11			
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	0.56	HV	
TOKUSIIIIIa TTET.						
			9/12 ~ 9/13			
	20		10/10 ~ 10/17	0.22	MV	
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)				
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		HV	
Ehime Pref.	31		9/4 ~ 9/5	0.50		
			9/5 ~ 9/6			
			9/10 ~ 9/11			
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.77	HV	
i ukuoka i ici.	32	Omata City Government Bunding (Omata City)	9/12 ~ 9/13	0.77	111	
2 7 2	22		9/11 ~ 9/18	0.40	207	
Saga Pref.	33	33 Saga Prefectural Environmental Research Center (Saga City)		0.18	MV	
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2			
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	0.07	HV	
		Science (Ouo City)	10/3 ~ 10/4			
			9/11 ~ 9/18			
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	//10	0.06	MV	
,		(Miyazaki City)		****		
			0/25 - 0/26			
77 1: B 2	2-	Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	0.10	****	
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	0.10	HV	
			9/27 ~ 9/28			
			8/27 ~ 8/28			
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	tr(0.02)	HV	
			8/29 ~ 8/30			
V-4- 1) D-44: f-		(-i4-) i- hd 4hhf -i4 4h (4hhf -i44	-:			

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

[1-5-2] 2,3,4,4',5-Pentachlorobiphenyl (#114)/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 29/37 (Missing value: 0)
Detection Frequency (sample): 29/37 (Missing value: 0)

Detection limit: 0.009 Quantification limit: 0.022

	stats
Geometric mean	tr(0.020)
Median	0.026
Maximum	0.12
Minimum	nd

T1	NI.	Maritana daitan	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	tr(0.011)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	tr(0.010)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	tr(0.014)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(0.014)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	tr(0.015)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.055	MV
	9	Chichijima Island	10/7 ~ 10/14	tr(0.010)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.030	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.079	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.027	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.061	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.026	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.033	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.014)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.048	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.039	HV

Y 1 1.1		M 2 12	Warm		
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21		9/12 ~ 9/13	0.093	HV
		(Osaka City)	9/13 ~ 9/14		
		Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	0.037	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.12	HV
		g g,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.032	HV
		Tomi Tim Quanty Monitoring Dunion (Tomi City)	9/20 ~ 9/21	0.032	***
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Similane 1 lei.	23	OKI IVational Acid Kain Observatory (Okinosinina Town)	9/26 ~ 9/21	nu	11 V
			9/18 ~ 9/19		
Him shim of City	26	Historian City Valuation Links of the Advisory City		0.099	HV
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.099	пv
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28	0.040	
Yamaguchi Pref.	27	(Yamaguchi City)		0.040	MV
		, ,			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		0.035	MV
		Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	0.047	HV
		Environmental beforees center (Tokusinina erty)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.023	MV
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.	31		9/4 ~ 9/5	0.038	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.067	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		tr(0.018)	MV
Ü				` '	
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	nd	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	2/11 2/10	nd	MV
	23	(Miyazaki City)			2.1 1
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	tr(0.009)	HV
ragosimila Fiel.	50	Health (Kagoshima City)	*******************************	u(0.009)	11 V
			9/27 ~ 9/28		
Oliman B. C	27	Constitute (Venionali Villene)	8/27 ~ 8/28		1137
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[1-5-3] 2,3',4,4'-5-Pentachlorobiphenyl (#118)/air (pg/m3)

Monitored year :2018

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

Detection limit : 0.03 Quantification limit : 0.08

	stats
Geometric mean	0.63
Median	0.62
Maximum	4.3
Minimum	tr(0.05)

T1	NI.	Maritana daitan	Warm	season	A :1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.19	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.31	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.19	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.47	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.36	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.25	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.43	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	1.6	MV
	9	Chichijima Island	10/7 ~ 10/14	0.26	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.98	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	2.5	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.57	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	1.4	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.23	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	1.0	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	1.0	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.45	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	1.5	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.22	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	1.2	HV

Local communities	No	Monitored sites	Warm season		Air sampler
socar communicies	1.0		Sampling dates	measured value	rin sampler
		One-les Leint Perfortered Community Building Building 2 Amoun	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	3.0	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	1.2	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	4.3	HV
		, , , , , , , , , , , , , , , , , , , ,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	1.1	HV
ivara i ici.	24	Temi Air Quanty Montoring Station (Temi City)		1.1	117
			9/20 ~ 9/21		
			9/25 ~ 9/26	0.40	****
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.13	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	3.0	HV
			9/20 ~ 9/21		
		Y LID C . IV do . CD III IV II . ID	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		1.0	MV
		(Yamaguchi City)			
•			8/21 ~ 8/28		
	28	28 Hagi Health and Welfare Center (Hagi City)		0.95	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	1.6	HV
Tokusiiiiia Tici.			9/12 ~ 9/13	1.0	111
			10/10 ~ 10/17		
K D C	30		10/10 ~ 10/17	0.62	MV
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.62	IVI V
			0.00		
THE TO 0		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		****
Ehime Pref.	31		9/4 ~ 9/5	1.5	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	2.2	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		0.48	MV
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	0.22	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	7/11 7/10	0.17	MV
, uzuki i ici.	33	(Miyazaki City)		0.17	111 1
			9/25 ~ 9/26		
Vhim D C	20	Kagoshima Prefectural Institute for Environmental Research and Public		0.20	****
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	0.29	HV
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	tr(0.05)	HV
		1	8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽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/m3)

Monitored year :2018

Detection Frequency (site): 30/37 (Missing value: 0)
Detection Frequency (sample): 30/37 (Missing value: 0)

Detection limit: 0.008 Quantification limit: 0.022

	stats
Geometric mean	tr(0.018)
Median	tr(0.019)
Maximum	0.10
Minimum	nd

Local communities	M-	Manitana di sitan	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	tr(0.014)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	tr(0.010)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(0.011)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	tr(0.014)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.043	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.027	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.052	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.019)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.050	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.009)	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.021)	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.023	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.014)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.037	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.010)	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.029	HV

Local communities	No	Monitored sites	Warm	season	Air sampler
u communics	.10		Sampling dates	measured value	· · · · sumplei
		One has being Dougle at and Commence of Doubling Doubling 2 Among	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	0.058	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.033	HV
Hyogo Hen.	22	Tryogo Percetulai Environmentai Research Center (Robe City)	9/28 ~ 9/29	0.055	111
K I C'	22	W.L. Ch. C	10/2 ~ 10/3	0.10	1117
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.10	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.028	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
		, , , , , , , , , , , , , , , , , , , ,	9/27 ~ 9/28		
			9/18 ~ 9/19		
Hirochima City	26	Hiroshima City Vokutaiii Junior High School (Hiroshima City)		0.078	HV
Hiroshima City	∠0	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.078	пv
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		0.026	MV
		(Tumagacin City)			
			8/21 ~ 8/28		
	28	28 Hagi Health and Welfare Center (Hagi City)		0.029	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	0.038	HV
TOKUSIIIIIa TTET.				0.038	11.
			9/12 ~ 9/13		
	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17	tr(0.017)	
Kagawa Pref.					MV
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.	31		9/4 ~ 9/5	0.031	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.042	HV
i ukuoka i ici.	32	Onata City Government Bunding (Onata City)		0.042	11 4
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		tr(0.018)	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34		10/2 ~ 10/3	tr(0.019)	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	2,11 2,110	nd	MV
, uzuki i ici.	33	(Miyazaki City)		II.G	111 1
			0/25 0/26		
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	(0.000)	
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	tr(0.009)	HV
		. 6 3/	9/27 ~ 9/28		
			8/27 ~ 8/28	T	
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		
V-4- 1) D-44: 6		(-it-) :- hd 4h	-:4/4		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[1-5-5] 3,3',4,4',5-Pentachlorobiphenyl (#126)/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 17/37 (Missing value: 0)
Detection Frequency (sample): 17/37 (Missing value: 0)

Detection limit: 0.009 Quantification limit: 0.023

	stats
Geometric mean	nd
Median	nd
Maximum	0.036
Minimum	nd

I1iti	M-	Maritana daisa	Warm	season	A :1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(0.010)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	tr(0.017)	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.009)	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	tr(0.022)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.016)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.036	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.014)	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	tr(0.013)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.009)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	tr(0.014)	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	tr(0.009)	HV

v v v	M-	M 2 12	Warm	4: 1	
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21		9/12 ~ 9/13	tr(0.014)	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	nd	HV
, .		Tryogo Fretectului Environmentai Research Center (Robe City)	9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	tr(0.014)	HV
		,	10/4 ~ 10/5	,	
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	tr(0.010)	HV
		, , , , , , , , , , , , , , , , , , ,	9/20 ~ 9/21	. (
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Similare 11eri	20	California Field Fallin Gessel valory (California Fown)	9/27 ~ 9/28	u	
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.023	HV
Tillosillila City	20	Throshinia City Rokutaiji Jumoi Trigii School (Throshinia City)	9/20 ~ 9/21	0.023	11 V
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28	nd	MV
r amagucm Prei.	27	(Yamaguchi City)		na	IVI V
			0/21 0/20		
	20	W. W. M. AWAR C. A. W. CO.	8/21 ~ 8/28	,	107
	28	Hagi Health and Welfare Center (Hagi City)		nd	MV
	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/10 ~ 9/11	tr(0.013)	
Tokushima Pref.			9/11 ~ 9/12		HV
		·	9/12 ~ 9/13		
	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17	nd	
Kagawa Pref.					MV
			0/2 0/4		
Eli D. C	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	nd	HV
Ehime Pref.			9/4 ~ 9/5		
			9/5 ~ 9/6		
F1 1 F 6		0 . (0 . (0	9/10 ~ 9/11		****
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	nd	HV
			9/12 ~ 9/13		
a D 6	22		9/11 ~ 9/18	,	107
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		nd	MV
			10/1 10/2		
V D. C	24	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	t=(0.010)	1157
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	tr(0.010)	HV
			10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	(Miyazaki City)		nd	MV
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	nd	HV
		, <u>0</u>	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[1-6] Hexachlorobiphenyls/air (pg/m3)

Monitored year :2018

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

Detection limit : 0.05 Quantification limit : 0.13

	stats
Geometric mean	3.5
Median	3.3
Maximum	55
Minimum	0.28

T 1 22	N	W 2 12	Warm	season	A. 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	1.1	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	2.2	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	1.1	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	2.3	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	2.8	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	1.3	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	2.3	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	7.5	MV
	9	Chichijima Island	10/7 ~ 10/14	0.92	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	4.7	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	11	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	2.8	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	6.9	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	1.5	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	4.5	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	4.7	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	2.8	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	6.4	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	1.9	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	5.6	HV

Local communities	No	Monitored sites	Warm	season	Air sampler
socar communities	110		Sampling dates	measured value	7 th sumpler
		Only Isiat Duff atom Comment Building Duilding 2 Amoun	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	13	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	5.8	HV
, ,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	21	HV
		,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	5.4	HV
Ivara 1 ICI.	24	Tenii An Quanty Montoring Station (Tenii City)		3.4	11 V
			9/20 ~ 9/21		
			9/25 ~ 9/26	0.40	****
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.69	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	14	HV
			9/20 ~ 9/21		
		W. LIB C. H. C. CDIE W. H. L.	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		3.8	MV
-		(Yamaguchi City)			
			8/21 ~ 8/28		
	28 Hagi Health and Welfare Center (Hagi City)	0.20	3.8	MV	
		Tangi Troutin and Westale Comes (Tangi City)			
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	8.8	HV
TOKUSIIIII a T IEI.				0.0	11.
			9/12 ~ 9/13		
W D 6	30	30 Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17	3.3	MV
Kagawa Pref.					
	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.			9/4 ~ 9/5	11	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	55	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		2.5	MV
		T D C . IV C . CF	10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	1.3	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment)/11)/10	0.99	MV
, uzuki i ici.	33	(Miyazaki City)		0.77	111 1
			0/25 - 0/26		
Vhim D C	20	Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	2.1	1117
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	2.1	HV
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	0.28	HV
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[1-6-1] 2,3,3',4,4',5-Hexachlorobiphenyl (#156)/air (pg/m3)

Monitored year :2018

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

Detection limit : 0.01 Quantification limit : 0.04

	stats
Geometric mean	tr(0.04)
Median	tr(0.03)
Maximum	0.37
Minimum	tr(0.01)

Local communities No Monitored sites		Warm	season	Air sampler	
Local communities	NO	Monitored sites	Sampling dates	measured value	Ali sampiei
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	tr(0.01)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	tr(0.01)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.01)	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	tr(0.02)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	tr(0.02)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(0.02)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	tr(0.02)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.08	MV
	9	Chichijima Island	10/7 ~ 10/14	tr(0.02)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.04	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.15	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.03)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.11	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.01)	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.05	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.05	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.02)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.10	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.01)	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.05	HV

Y 1 1.1		M 2 12	Warm		
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	0.15	HV
		(Osaka City)	9/13 ~ 9/14		
		Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	0.06	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.18	HV
		,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.06	HV
	2.	Tomi Tim Quanty Monitoring Dunion (Tomi City)	9/20 ~ 9/21	0.00	***
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	tr(0.01)	HV
Similane 1 lei.	23	Oki National Acid Kain Observatory (Okinosinnia Town)	9/26 ~ 9/27	11(0.01)	11 V
			9/18 ~ 9/19		
Hiroshima City	26	Himshims City Valentsiii Issian High Cabaal (Hissabina City)		0.12	HV
Hiroshina City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.12	пv
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28	0.01	
Yamaguchi Pref.	27	(Yamaguchi City)		0.06	MV
		, ,			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		0.06	MV
		Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	0.08	HV
		Environmental sciences center (Tokusinina city)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		tr(0.03)	MV
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.	31		9/4 ~ 9/5	0.12	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.37	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		tr(0.03)	MV
Ü				` ′	
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	tr(0.02)	HV
	34	Science (Udo City)	10/3 ~ 10/4	, (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	2/11 2/10	tr(0.01)	MV
	33	(Miyazaki City)		4(0.01)	2.1.1
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	tr(0.02)	HV
ragosimila i ici.	50	Health (Kagoshima City)	9/26 ~ 9/27	u(0.02)	HV
			8/27 ~ 8/28		
Okinawa Pref.	27	Cone Hado (Vunigami Villaga)		tn(0,01)	HV
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	tr(0.01)	HV
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

[1-6-2] 2,3,3',4,4',5'-Hexachlorobiphenyl (#157)/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 23/37 (Missing value: 0)
Detection Frequency (sample): 23/37 (Missing value: 0)

Detection limit: 0.008

Quantification limit: 0.019

	stats
Geometric mean	tr(0.012)
Median	tr(0.012)
Maximum	0.19
Minimum	nd

T1	NI.	Maritana daitan	Warm	season	A :1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	tr(0.008)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.026	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.015)	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.040	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.012)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.032	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.012)	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	tr(0.016)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.011)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.030	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	tr(0.013)	HV

Local communities	No	Monitored sites	Warm	season	Air sampler
	- 10		Sampling dates	measured value	Jumpier
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	(Osaka City)	9/12 ~ 9/13	0.044	HV
		(Osaka City)	9/13 ~ 9/14		
		22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	tr(0.017)	HV
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.051	HV
, i			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	tr(0.016)	HV
runu rici.	2-1	remittin Quanty Womtoring Station (Temt etty)	9/20 ~ 9/21	11(0.010)	111
CI: D.C	25	OUNT OF A STREET	9/25 ~ 9/26	,	1117
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.037	HV
			9/20 ~ 9/21		
		V	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		tr(0.015)	MV
		(Yamaguchi City)			
		28 Hagi Health and Welfare Center (Hagi City)	8/21 ~ 8/28	tr(0.016)	MV
	28				
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	0.022	HV
T ORGONIA T TOTA			9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	30 Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 - 10/17	tr(0.010)	MV
Kagawa Fiei.					
			0/2 0/4		
F1: D 6	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	0.005	HV
Ehime Pref.			9/4 ~ 9/5	0.086	
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.19	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		tr(0.010)	MV
		W D. C IV. C CD. IV. W. Id IT	10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	nd	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	2,11 2,110	nd	MV
, ш.ш 101.		(Miyazaki City)			
			9/25 ~ 9/26		
Vagashima Dr-f	26	Kagoshima Prefectural Institute for Environmental Research and Public		nd	LIV
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[1-6-3] 2,3',4,4',5,5'-Hexachlorobiphenyl (#167)/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 27/37 (Missing value: 0)
Detection Frequency (sample): 27/37 (Missing value: 0)

Detection limit: 0.009 Quantification limit: 0.024

	stats
Geometric mean	tr(0.016)
Median	tr(0.014)
Maximum	0.14
Minimum	nd

Local communities	NI-	Manitana di sitan	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	tr(0.011)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	tr(0.011)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(0.010)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	tr(0.012)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.038	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.026	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.062	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.014)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.043	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.020)	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.027	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.010)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.044	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	tr(0.022)	HV

w w 100		V 5 15	Warm		
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21		9/12 ~ 9/13	0.065	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.031	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.085	HV
		g (g,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.028	HV
		()	9/20 ~ 9/21	0.020	
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Similare 1 ter.	23	Oki National Field Rain Observatory (Okinosinina Town)	9/27 ~ 9/28	na	111
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.058	HV
Hilosiiiiia City	20	Hirosinina City Kokutaiji Junioi Higii School (Hirosinina City)	9/19 ~ 9/20	0.038	пу
V LID C	27	Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28	. (0.022)	MV
Yamaguchi Pref.	27	(Yamaguchi City)		tr(0.023)	MV
			0.01		
	20	W. W. M. D. D. W. M. C.	8/21 ~ 8/28	. (0.000)	107
	28	Hagi Health and Welfare Center (Hagi City)		tr(0.022)	MV
	•	Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11	0.041	
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	0.041	HV
		·	9/12 ~ 9/13		
	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17	tr(0.013)	
Kagawa Pref.					MV
			0.00		
FII: B 6	21	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	0.053	****
Ehime Pref.	31		9/4 ~ 9/5		HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.14	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		tr(0.014)	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		_
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	nd	HV
		, y	10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	(Miyazaki City)		nd	MV
		()			
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	tr(0.009)	HV
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[1-6-4] 3,3',4,4',5,5'-Hexachlorobiphenyl (#169)/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 1/37 (Missing value: 0)
Detection Frequency (sample): 1/37 (Missing value: 0)

Detection limit : 0.008 Quantification limit : 0.020

	stats
Geometric mean	nd
Median	nd
Maximum	tr(0.010)
Minimum	nd

T 1 22	NY	W 2 12	Warm	season	A: 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	nd	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	nd	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	tr(0.010)	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	nd	HV

T 1 22	No	Monitored sites	Warm season		A. 1
Local communities			Sampling dates	measured value	Air sampler
Osaka Pref.			9/11 ~ 9/12	nd	HV
	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13		
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	nd	HV
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	nd	HV
Ť			10/4 ~ 10/5		
			9/18 ~ 9/19	nd	
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20		HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	nd	HV
Tinosinina City	20	Throshina City Rokataiji vanioi Tiigii Benooi (Tiiroshina City)	9/20 ~ 9/21	nu nu	11 7
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment	0/21 - 0/20	nd	MV
i amagucini Fier.	2.1	(Yamaguchi City)		iid	IVI V
			8/21 ~ 8/28		
	20	Hari Harikhand Walfana Cantan (Hari Cita)	8/21 ~ 8/28	4	MV
	28	Hagi Health and Welfare Center (Hagi City)		nd	IVI V
			0/10 0/11		
T 1 1: D 6	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/10 ~ 9/11	,	1117
Tokushima Pref.			9/11 ~ 9/12	nd HV	HV
			9/12 ~ 9/13		
IZ D C	30		10/10 ~ 10/17	nd	MV
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		na	IVI V
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	nd	HV
Ellille Fiel.			9/4 ~ 9/3		
			9/10 ~ 9/11		
Eulander Darf	32	Ot- Cit. C			HV
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	nd	пv
			9/12 ~ 9/13		
C Df	22	Same Destanting I Ferriman and a Dessarah Contra (Same City)	9/11 ~ 9/18	nd	MV
Saga Pref.	33	3 Saga Prefectural Environmental Research Center (Saga City)		na	IVI V
			10/1 - 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2 10/2 ~ 10/3	nd	HV
Kumamoto Fier.	34	Science (Udo City)		na	пу
			10/3 ~ 10/4		
Missaulsi Davić	25	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		MV
Miyazaki Pref.	35	(Miyazaki City)		nd	MV
			0/05 0/05		
W 1: 5 a	36	Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City)	9/25 ~ 9/26	,	1777
Kagoshima Pref.			9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[1-7] Heptachlorobiphenyls/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 36/37 (Missing value: 0)
Detection Frequency (sample): 36/37 (Missing value: 0)

Detection limit : 0.06 Quantification limit : 0.15

	stats
Geometric mean	0.70
Median	0.69
Maximum	36
Minimum	nd

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	NO	Monitored sites	Sampling dates	measured value	Ali sampiei
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.26	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.26	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.21	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.39	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.85	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.24	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.39	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	1.3	MV
	9	Chichijima Island	10/7 ~ 10/14	0.19	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.84	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	1.6	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.73	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	1.5	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.35	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.46	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.60	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.78	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	1.5	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.48	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.67	HV

T 1 22	No	Monitored sites	Warm season		A · 1
Local communities			Sampling dates	measured value	Air sampler
Osaka Pref.			9/11 ~ 9/12	2.0	
	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13		HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	1.1	HV
, -8		7,0	9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	4.0	HV
		,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.86	HV
ivara i ici.	24		9/20 ~ 9/21		111
Shimane Pref.	25	Obi National Asid Bair Observatory (Obinashima Taura)	9/25 ~ 9/26	. (0.12)	HV
Sillilane Fier.	23	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	tr(0.13)	пу
			9/27 ~ 9/28		
*** ** **			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	2.2	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		0.98	MV
		(Tuninguein City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		0.87	MV
	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/10 ~ 9/11	1.7	HV
Tokushima Pref.			9/11 ~ 9/12		
			9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.62	MV
	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.			9/4 ~ 9/5	8.2	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	36	HV
i ukuoka i ici.	32	Omata City Government Bunding (Omata City)	9/12 ~ 9/13	50	11 4
			9/11 ~ 9/18		
Saga Pref.	33	Saga Profactural Environmental Passarch Center (Saga City)	9/11 - 9/16	0.44	MV
Saga Fiel.	33	Saga Prefectural Environmental Research Center (Saga City)		0.44	IVI V
			10/1 10/2		
W . B .	2.4	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	0.25	1177
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	0.26 HV	HV
			10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)	9/11 ~ 9/18		
Miyazaki Pref.	35			0.21	MV
		, y			
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City)	9/25 ~ 9/26	0.69	
			9/26 ~ 9/27		HV
		Ticarui (Ragosiilila City)	9/27 ~ 9/28		
		37 Cape Hedo (Kunigami Village)	8/27 ~ 8/28		
Okinawa Pref.	37		8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		
		ı			

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

 $\hbox{ [1-7-1] } 2,2',3,3',4,4',5-Heptachlorobiphenyl\ (\#170)/air\ (pg/m3)$

Monitored year :2018

Detection Frequency (site): 36/37 (Missing value: 0)
Detection Frequency (sample): 36/37 (Missing value: 0)

Detection limit : 0.008 Quantification limit : 0.021

	stats
Geometric mean	0.057
Median	0.055
Maximum	2.3
Minimum	nd

T1iti	NI.	Maritana daitan	Warm	season	A :1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.023	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	tr(0.015)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.018)	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.028	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.068	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.022	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.030	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.11	MV
	9	Chichijima Island	10/7 ~ 10/14	0.021	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.074	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.16	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.071	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.11	н٧
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.021	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.041	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.060	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.062	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.15	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.025	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.050	HV

Y 1 1.1		W 2 12	Warm	season	
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	0.17	HV
		(Osaka City)	9/13 ~ 9/14		
		2 Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	0.082	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.27	HV
		,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.055	HV
		Tomi Tim Quanty Monitoring Dunion (Tomi City)	9/20 ~ 9/21	0.055	***
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	tr(0.011)	HV
Similane 1 lei.	23	Oki National Acid Kain Observatory (Okinosinnia Town)	9/26 ~ 9/21	u(0.011)	11 V
II: 1: C:	26	Hr. 1: C: K1 ("L. H. 101 10L 11 C.)	9/18 ~ 9/19	0.16	1117
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.16	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		0.093	MV
		(g			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		0.082	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	0.12	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.050	MV
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	1.0	HV
			9/5 ~ 9/6		111
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	2.3	HV
i ukuoka i ici.	32	Omata City Government Bunding (Omata City)	9/12 ~ 9/13	2.3	111
			9/12 ~ 9/13		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)	9/11 ~ 9/18	0.035	MV
Saga Fiel.	33	Saga Frerectural Environmental Research Center (Saga City)		0.055	IVI V
			10/1 10/2		
W . B .	2.4	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	. (0.017)	777.7
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	tr(0.017)	HV
		·	10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		_
Miyazaki Pref.	35	(Miyazaki City)		tr(0.017)	MV
		, y			
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	Т	
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	0.048	HV
		Ticatui (Nagosimila City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

 $\hbox{[1-7-2] $2,2',3,4,4',5,5'-Heptachlorobiphenyl ($\#180)$/air ($pg/m3)}$

Monitored year :2018

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

Detection limit: 0.009 Quantification limit: 0.022

	stats
Geometric mean	0.11
Median	0.10
Maximum	6.7
Minimum	tr(0.017)

T1iti	N-	Maritana daitan	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.038	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.034	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.035	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.060	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.16	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.035	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.063	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.21	MV
	9	Chichijima Island	10/7 ~ 10/14	0.040	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.14	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.27	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.12	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.17	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.031	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.078	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.098	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.13	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.26	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.053	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.093	HV

Y 1 1.1		W 2 12	Warm	season	
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	0.35	HV
		(Osaka City)	9/13 ~ 9/14		
		Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	0.18	HV
,		7,0	9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.63	HV
		,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.11	HV
rtara r rer.	2-1	remittin Quanty Monitoring Station (Tentre city)	9/20 ~ 9/21	0.11	111
			9/25 ~ 9/26		
Shimane Pref.	25	Oli National Asid Bain Observatory (Oliverations Towns)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	tr(0.020)	HV
Sillilane Fiel.	23	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	u(0.020)	пу
			9/27 ~ 9/28		
*** ** **			9/18 ~ 9/19		****
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.35	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		0.19	MV
		(Tuninguein City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		0.17	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	0.27	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.10	MV
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	2.3	HV
			9/5 ~ 9/6	2.3	
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	6.7	HV
i ukuoka i ici.	32	Omata City Government Bunding (Omata City)	9/12 ~ 9/13	0.7	11 V
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)	9/11 - 9/16	0.062	MV
Saga i iei.	33	Saga Freiectural Environmental Research Center (Saga City)		0.002	1V1 V
			10/1 10/2		
V D. C	24	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	0.022	1137
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	0.032	HV
		·	10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	(Miyazaki City)		0.028	MV
		**			
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	0.10	HV
		Trouble (Tagoomine City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	tr(0.017)	HV
			8/29 ~ 8/30		
			0/27 0/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

[1-7-3] 2,3,3',4,4',5,5'-Heptachlorobiphenyl (#189)/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 6/37 (Missing value: 0)
Detection Frequency (sample): 6/37 (Missing value: 0)

Detection limit : 0.008 Quantification limit : 0.022

	stats
Geometric mean	nd
Median	nd
Maximum	0.032
Minimum	nd

T 1 22	N	W 2 12	Warm	season	A. 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	nd	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	tr(0.009)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	tr(0.011)	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	nd	HV

v v v		W 5 15	Warm	season	
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	nd	HV
		(Osaka City)	9/13 ~ 9/14		
		Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	nd	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	tr(0.009)	HV
Ť			10/4 ~ 10/5	, ,	
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	nd	HV
		, , , , , , , , , , , , , , , , , , ,	9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Similare 11eri	20	Carrier France Control (Carrier County)	9/27 ~ 9/28	u	
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	tr(0.011)	HV
Throsinna City	20	Throshinia City Kokutaiji Junioi Trigii School (Throshinia City)	9/20 ~ 9/21	u(0.011)	11 V
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28	nd	MV
i amaguciii Prei.	27	(Yamaguchi City)		iid	IVI V
			0/21 0/20		
	20	W. W. M. D. D. W. G. C.	8/21 ~ 8/28	,	107
	28	Hagi Health and Welfare Center (Hagi City)		nd	MV
			0.14.0		
	•	Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		****
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	nd	HV
			9/12 ~ 9/13		
W D C	20	W. D. C. J. D. L. C. L. D. L. C. L.	10/10 ~ 10/17	,	107
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		nd	MV
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)		0.023	HV
Enime Prei.	31		9/4 ~ 9/5		нv
			9/5 ~ 9/6		
El I D C	32	O (C) C (P) III (O (C))	9/10 ~ 9/11	0.032	HV
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.032	HV
			9/12 ~ 9/13		
c p c	22		9/11 ~ 9/18	,	M
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		nd	MV
			10/1 - 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	nd	HV
Kumamoto Prei.	34	Science (Udo City)	10/2 ~ 10/3	na	пv
			10/3 ~ 10/4		
M. 110.0	25	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	,	107
Miyazaki Pref.	35	(Miyazaki City)		nd	MV
			0.00		
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		****
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[1-8] Octachlorobiphenyls/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 21/37 (Missing value: 0)
Detection Frequency (sample): 21/37 (Missing value: 0)

Detection limit : 0.06 Quantification limit : 0.14

	stats
Geometric mean	tr(0.08)
Median	tr(0.06)
Maximum	4.3
Minimum	nd

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	NO	Monitored sites	Sampling dates	measured value	Ali sampiei
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	tr(0.10)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.14	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.06)	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.18	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.10)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.19	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.10)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.17	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	tr(0.07)	HV

Local communities	No	No Monitored sites	Warm season		Air sampler
Local communities	110		Sampling dates	measured value	7 in sumplet
		One has being Dougle at and Commenced Doubling Doubling 2 Among	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	0.22	HV
		(Osaka City)	9/13 ~ 9/14		
		22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	tr(0.12)	HV
, 0		, , , , , , , , , , , , , , , , , , , ,	9/28 ~ 9/29	` '	
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.38	HV
Hobe City	23	Robe city Government Bunding (Robe city)	10/4 ~ 10/5	0.50	111
N. D. C	24	The state of the Market State of the state of	9/18 ~ 9/19	. (0.06)	1111
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	tr(0.06)	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.24	HV
Ĭ.			9/20 ~ 9/21		
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment	0/21 0/20	tr(0.13)	MV
i amaguciii i iei.	27	(Yamaguchi City)		u(0.13)	IVI V
			0/21 0/20		
		20 11 11 11 11 11 12 13 1	8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		tr(0.11)	MV
		Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/10 ~ 9/11		
Tokushima Pref.	29		9/11 ~ 9/12	0.17	HV
			9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	0 Kagawa Prefectural Public Swimming Pool (Takamatsu City)		tr(0.10)	MV
		9 (. (,	
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	2.1	LIV
Ellille Fiel.				2.1	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	4.3	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		nd	MV
					•
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	nd	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Missauli David	25	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	4	MS/
Miyazaki Pref.	35	(Miyazaki City)		nd	MV
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	tr(0.06)	HV
		Trouble (Tangoonina City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30	-	•
		(-it-) :- hd 4h	-:4/4l		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[1-9] Nonachlorobiphenyls/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 9/37 (Missing value: 0)
Detection Frequency (sample): 9/37 (Missing value: 0)

Detection limit : 0.03 Quantification limit : 0.09

	stats
Geometric mean	nd
Median	nd
Maximum	0.22
Minimum	nd

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	NO	Monitored sites	Sampling dates	measured value	All sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(0.03)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	tr(0.03)	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	tr(0.04)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	tr(0.05)	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	tr(0.03)	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	nd	HV

T 1 22	M	No Monitored sites	Warm	A :1	
Local communities	No		Sampling dates	measured value	Air sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	tr(0.03)	HV
		(Osaka City)	9/13 ~ 9/14		
		P. Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	nd	HV
,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	nd	HV
		,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	nd	HV
11444 1161.	2.	Tomi Tim Quanty Monitoring Dunion (Tomi City)	9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Similare 1 fer.	23	Oki National Acid Kain Observatory (Okinosinnia Town)	9/26 ~ 9/27	nu	11 V
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/18 ~ 9/19	tr(0.04)	HV
Hiroshina City	20	Hirosnima City Kokutaiji Junior High School (Hirosnima City)	9/19 ~ 9/20	tr(0.04)	пv
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		nd	MV
		, ,			
			8/21 ~ 8/28		
	28	28 Hagi Health and Welfare Center (Hagi City)		nd	MV
		Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	nd	HV
		Environmental sciences center (Tokusinina city)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		nd	MV
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.	31		9/4 ~ 9/5	0.14	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.22	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		nd	MV
J					
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	nd	HV
Kumamoto i ici.		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	2/11 2/10	nd	MV
	33	(Miyazaki City)			2.2 7
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	nd	HV
Nagosimila Fiel.	30	Health (Kagoshima City)	************************	nu	11 V
			9/27 ~ 9/28		
Oliman B. C	27	Constitute (Viniconi Villore)	8/27 ~ 8/28	ا	1157
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[1-10] Decachlorobiphenyl/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 13/37 (Missing value: 0) Detection Frequency (sample): 13/37 (Missing value: 0) Detection limit: 0.02

Quantification limit: 0.04

	stats
Geometric mean	nd
Median	nd
Maximum	0.05
Minimum	nd

T 1 22	N	W 2 12	Warm	season	4. 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	tr(0.02)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	tr(0.02)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.04	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.04	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	tr(0.03)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	tr(0.02)	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.02)	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	tr(0.02)	HV

Local communities	No	Monitored sites	Warm season		Air sampler
zoem communities	110		Sampling dates	measured value	7 in sumplet
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	(Osaka City)	9/12 ~ 9/13	nd	HV
		(Osaka City)	9/13 ~ 9/14		
		22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	0.05	HV
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	tr(0.02)	HV
		β(3)	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	nd	HV
runu r rer.	2-1	remittin Quanty Womtoring Station (Temt etty)	9/20 ~ 9/21	na	111
Shimane Pref.	25	Oki National Asid Bair Observatory (Okinashima Tanan)	9/25 ~ 9/26	4	HV
Shimane Prei.	23	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	нv
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	tr(0.02)	HV
			9/20 ~ 9/21		
	27	Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	8/21 ~ 8/28		MV
Yamaguchi Pref.				nd	
		(1 dinagueni City)			
			8/21 ~ 8/28		
1 :	28	8 Hagi Health and Welfare Center (Hagi City)		nd	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	nd	HV
			9/12 ~ 9/13	-	
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 10/17	nd	MV
ragawa 1 ici.					111 4
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)		nd	HV
Emme Prei.			9/4 ~ 9/5	nd	
			9/5 ~ 9/6		
	32		9/10 ~ 9/11	0.04	
Fukuoka Pref.		Omuta City Government Building (Omuta City)	9/11 ~ 9/12		HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		tr(0.02)	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	nd	HV
		Science (Odo City)	10/3 ~ 10/4		
		ME TO CALL OF CONTRACT OF THE	9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment		nd	MV
-		(Miyazaki City)			
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	nd	HV
500mma 1 ici.	50	Health (Kagoshima City)	9/27 ~ 9/28	IIG	11 7
			8/27 ~ 8/28		
Olimana Bas C	27	Constitute (Venionali Villene)		4	1137
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[2] Hexachlorobenzene/air (pg/m3)

Monitored year :2018

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

Detection limit : 0.2 Quantification limit : 0.4

	stats
Geometric mean	100
Median	100
Maximum	140
Minimum	72

Local communities	No	Monitored sites		season	Air sampler
Local communities	110	Homored sites	Sampling dates	measured value	7111 Sumpler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	96	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	90	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	82	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	120	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	120	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	98	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	110	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	120	MV
	9	Chichijima Island	10/7 ~ 10/14	83	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	100	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	130	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	86	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	120	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	97	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	97	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	140	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	94	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	130	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	94	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	100	HV

Local communities	No	No Monitored sites	Warm season		Air sampler
Local communities	140		Sampling dates	measured value	All sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	110	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	87	HV
Hyogo Fiel.	22	Hyogo Freiecturai Environmentai Research Center (Robe City)		07	п٧
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	120	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	120	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	81	HV
		, , , , , , , , , , , , , , , , , , , ,	9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	140	HV
imosiiiiia City	20	Throshina City Kokutaiji Julioi riigii School (riitoshiffia City)		140	пу
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		100	MV
		(Tumagaem exty)			
			8/21 ~ 8/28		
	28	28 Hagi Health and Welfare Center (Hagi City)		94	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	100	HV
101110111111111111111111111111111111111		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13	100	
			10/10 ~ 10/17		
IZ D.C	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17	0.6	MV
Kagawa Pref.				96	MV
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		HV
Ehime Pref.	31		9/4 ~ 9/5	130	
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	130	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	110	MV
	33	Saga Frerectural Environmental Research Center (Saga City)		110	
			10/1 ~ 10/2		
Kumamata Deaf	34	Kumamoto Prefectural Institute of Public Health and Environmental		120	HV
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	120	пу
			10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	(Miyazaki City)		82	MV
		(J J/			
	-	Variable Defeated Institute for E	9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	100	HV
		Health (Kagoshima City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	72	HV
Okmawa 1101.	31	Cape Head (Ramgaini Vinage)		12	11 4
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[6] Endrin/air (pg/m3)

Monitored year :2018

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

Detection limit: *0.11 Quantification limit: *0.28

	stats
Geometric mean	5.8
Median	6.3
Maximum	72
Minimum	0.62

T 1 22	NY	W 2 12	Warm	season	A. 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	18	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	4.0	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	4.8	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	4.2	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	11	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	2.6	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	5.2	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	9.0	MV
	9	Chichijima Island	10/7 ~ 10/14	1.1	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	6.0	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	11	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	5.0	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	9.0	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	2.7	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	12	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	72	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	4.1	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	5.7	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	1.8	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	7.5	HV

Local communities	No	Monitored sites	Warm season		Air sampler
communities	1.0	Monto ed sites	Sampling dates	measured value	· · · · · · · · · · · · · · · · · · ·
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	(Osaka City)	9/12 ~ 9/13	13	HV
		(Osaka City)	9/13 ~ 9/14		
		22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	6.4	HV
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	8.0	HV
		3, 3,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	9.1	HV
Nara Tier.	24	Temi An Quanty Montoring Station (Temi City)		7.1	117
			9/20 ~ 9/21		
ar. P.	25		9/25 ~ 9/26	0.05	****
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.95	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	7.7	HV
			9/20 ~ 9/21		
		Y LID C . IV do . CD III II II II	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		6.3	MV
_		(Yamaguchi City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		16	MV
	20			10	112 1
			9/10 ~ 9/11		
Tokushima Pref.	20	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	10	HV
Tokusiiiiia Fiet.	29			10	п٧
			9/12 ~ 9/13		
	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17		
Kagawa Pref.				7.4	MV
	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.			9/4 ~ 9/5	12	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	32 Omuta City Government Building (Omuta City)	9/11 ~ 9/12	23	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		6.3	MV
ŭ	33	bugu Freiecturai Environmentai Research Center (bugu City)			171 7
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	2.5	HV
	J-1	Science (Udo City)	10/3 ~ 10/4	2.0	11.7
			9/11 ~ 9/18		
Miyagale: De-f	25	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	2.4	MO
Miyazaki Pref.	35	(Miyazaki City)		2.4	MV
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	1.9	HV
		. 6 9/	9/27 ~ 9/28		
			8/27 ~ 8/28	T	
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	0.62	HV
			8/29 ~ 8/30		
V . 1) To		(-it-) :- hd db	-:4/4bb		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) \ast : indicates the sum value of the Quantification [Detection] limits of each congener.

[6-1] DDTs/air (pg/m3)

Monitored year :2018

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

Detection limit : 0.01 Quantification limit : 0.03

	stats
Geometric mean	1.6
Median	2.0
Maximum	14
Minimum	0.15

Local communities	No Monitored sites		Warm season		Air sampler
Local communities	NO	Wontored sites	Sampling dates	measured value	Ali samplei
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	5.0	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	1.0	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.86	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	1.2	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	1.8	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.67	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	1.6	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	2.6	MV
	9	Chichijima Island	10/7 ~ 10/14	0.36	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	2.0	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	3.3	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	1.5	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	2.6	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.66	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	3.1	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	14	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	1.3	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	1.9	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.49	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	2.5	HV

Local communities	No	Monitored sites		season	Air sampler
Local communices	110	Montored sites	Sampling dates	measured value	7 m sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	4.3	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	2.1	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	2.0	HV
		,	10/4 ~ 10/5	=.0	
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	2.8	HV
Naia Fiei.	24	Tenri Air Quality Monitoring Station (Tenri City)		2.0	п٧
			9/20 ~ 9/21		
			9/25 ~ 9/26		****
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.22	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	2.4	HV
			9/20 ~ 9/21		
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		2.2	MV
_		(Yamaguchi City)			
•			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		6.6	MV
	20	ringi ricului unu vionare comei (ringi city)		0.0	,
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	3.4	HV
Tokusiiiiia Fiet.	29	Environmental Sciences Center (Tokushima City)		3.4	п٧
			9/12 ~ 9/13		
**	•		10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		2.2	MV
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.	31		9/4 ~ 9/5	3.9	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	7.7	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		1.7	MV
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	0.53	HV
		Science (Udo City)	10/2 10/3		
			9/11 ~ 9/18	-	
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 - 9/18	0.53	MV
IVIIYAZAKI FICI.	33	(Miyazaki City)		0.55	1V1 V
			0/05 0/05		
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	0.42	HV
		1	9/27 ~ 9/28		
Ü					
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/27 ~ 8/28 8/28 ~ 8/29	0.15	HV

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[6-2] p,p'-DDT /air (pg/m3)

Monitored year :2018

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

Detection limit : 0.01 Quantification limit : 0.03

	stats
Geometric mean	2.6
Median	2.5
Maximum	49
Minimum	0.31

T 1 22	N	W 2 12	Warm	season	A . 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	9.3	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	2.1	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	3.2	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	1.8	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	7.6	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	1.2	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	2.3	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	3.9	MV
	9	Chichijima Island	10/7 ~ 10/14	0.38	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	2.4	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	4.3	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	2.3	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	4.1	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	1.3	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	5.1	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	49	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	1.6	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	2.2	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.77	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	2.5	HV

Local communities	No	Monitored sites		season	Air sampler
Local communices	110	Montored sites	Sampling dates	measured value	7 m sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	4.7	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	2.3	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	3.8	HV
		,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tanri Air Quality Manitaring Station (Tanri City)		3.5	HV
Naia Fiei.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	3.3	п٧
			9/20 ~ 9/21		
			9/25 ~ 9/26		****
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.37	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	3.1	HV
			9/20 ~ 9/21		
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		2.5	MV
		(Yamaguchi City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		6.3	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	3.9	HV
rokusinina r ici.	27	Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13	3.7	111
			10/10 ~ 10/17		
Kagawa Pref.	30	V Professoral Dublic Conjuguida - De al (Talamatan Cita)	10/10 ~ 10/17	3.0	MV
Kagawa Prei.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		3.0	IVI V
			9/3 ~ 9/4		
El: D C	21	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)			1137
Ehime Pref.	31		9/4 ~ 9/5	5.1	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	9.0	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		2.8	MV
		Kumamata Drafactural Institute of Dublic Health and E	10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	1.2	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment		1.4	MV
		(Miyazaki City)			
			9/25 ~ 9/26	+	
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	0.85	HV
ragosiinia 1101.	30	Health (Kagoshima City)	9/26 ~ 9/27	0.03	11 V
01: 5 6	25		8/27 ~ 8/28	0.21	****
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	0.31	HV
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[6-3] p,p'-DDE /air (pg/m3)

Monitored year :2018

Detection Frequency (site) : 36/37 (Missing value : 0)
Detection Frequency (sample) : 36/37 (Missing value : 0)

Detection limit : 0.03 Quantification limit : 0.07

	stats
Geometric mean	0.13
Median	0.16
Maximum	0.72
Minimum	nd

I1iti	M-	Manitana Laitan	Warm	season	A :1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.30	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.08	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.05)	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.10	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.11	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.10	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.16	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.25	MV
	9	Chichijima Island	10/7 ~ 10/14	0.07	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.19	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.27	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.14	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.18	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.08	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.19	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.72	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.09	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.11	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.04)	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.19	HV

Local communities	No	Monitored sites	Warm	season	Air sampler
zoea. communities	110	Wiolinored sites	Sampling dates	measured value	7 in sumplet
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	0.24	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.17	HV
, ,		, , , , , , , , , , , , , , , , , , , ,	9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.15	HV
Rose City	23	Robe city Government Bunding (Robe city)	10/4 ~ 10/5	0.15	11.
N D C	24	The state of the Market State of the state of	9/18 ~ 9/19	0.10	1117
Nara Pref.	24	4 Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.19	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	tr(0.06)	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.16	HV
Ĭ			9/20 ~ 9/21		
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment	0/21 0/20	0.21	MV
r amaguchi Pref.	21	(Yamaguchi City)		0.21	141 4
-			0/21 0/20		
			8/21 ~ 8/28		
2	28	Hagi Health and Welfare Center (Hagi City)		0.30	MV
		Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/10 ~ 9/11		
Tokushima Pref.	29		9/11 ~ 9/12	0.24	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.14	MV
C					
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	0.19	HV
Emme 1 ici.				0.19	п٧
			9/5 ~ 9/6		
			9/10 ~ 9/11	0.22	
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.33	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		0.18	MV
		W O C O II CO O C III CO C III CO O C III CO C III CO O C III CO C III CO O C III CO C III CO O C III CO C III CO O C III CO C	10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	0.07	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	<i>)</i> /11 <i>)</i> /10	tr(0.05)	MV
ivilyazaki i ici.	33	(Miyazaki City)		u(0.05)	141 4
			0/25 0/26		
77 II D 2	2.5	Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	0.11	****
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	0.11	HV
-			9/27 ~ 9/28		
-					
-			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/27 ~ 8/28 8/28 ~ 8/29	nd	HV

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[6-4] p,p'-DDD /air (pg/m3)

Monitored year :2018

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

Detection limit : 0.01 Quantification limit : 0.03

	stats
Geometric mean	1.0
Median	1.1
Maximum	6.3
Minimum	0.08

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	NO	Monitored sites	Sampling dates	measured value	Ali sampiei
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	3.2	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.70	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.54	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.80	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	1.0	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.42	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.87	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	1.4	MV
	9	Chichijima Island	10/7 ~ 10/14	0.16	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	1.1	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	2.0	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.83	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	1.8	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.49	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	2.3	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	6.3	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.89	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	1.1	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.37	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	1.9	HV

Local communities	No	No Monitored sites	Warm	season	Air sampler
Local communities	110		Sampling dates	measured value	7 III Sumpler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	2.7	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	1.4	HV
11,0501161.		Tryogo Tretectana Zavironnienaa researen center (11660 city)	9/28 ~ 9/29	***	
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)		1.4	HV
Kobe City	23	Robe City Government Building (Robe City)	10/3 ~ 10/4	1.4	п٧
			10/4 ~ 10/5		
			9/18 ~ 9/19	4.0	****
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	1.8	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.20	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	26 Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	1.6	HV
-			9/20 ~ 9/21		
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment	0,21 0,20	0.99	MV
r unaguem r ren		(Yamaguchi City)		****	
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)	0/21 - 0/20	2.7	MV
	28	riagi freatti and Wenaie Center (fragi City)		2.7	1V1 V
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and		2.1	HV
TOKUSIIIIII FIEL.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	2.1	пу
			9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		1.6	MV
			0.00		
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	2.3	
Ehime Pref.	31		9/4 ~ 9/5		HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	4.5	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		1.1	MV
		W D. C IV day CD IV W. Id IT.	10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	0.40	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	2/11 2/10	0.30	MV
, 1 101.		(Miyazaki City)		0.50	*** *
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public		0.33	HV
Kagosiiiiia Fiel.	30	Health (Kagoshima City)	9/26 ~ 9/27	0.55	п٧
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	0.08	HV
	<u></u>		8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[6-5] o,p'-DDT /air (pg/m3)

Monitored year :2018

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

Detection limit : 0.02 Quantification limit : 0.05

	stats
Geometric mean	0.24
Median	0.26
Maximum	1.2
Minimum	tr(0.04)

Local communities	N-	Maritana daitan	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.46	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.11	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.11	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.19	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.24	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.10	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.20	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.54	MV
	9	Chichijima Island	10/7 ~ 10/14	0.08	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.22	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.54	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.15	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.24	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.10	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.85	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	1.2	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.17	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.26	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.13	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.28	HV

Local communities	No	Monitored sites	Warm season		Air sampler
Local communities	110		Sampling dates	measured value	An sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	0.53	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.26	HV
J 181		Tryogo Fretecturai Environmentai Research Center (Robe City)	9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.52	HV
noce ony	25	Trace city covernment Bunding (Note city)	10/4 ~ 10/5	0.02	
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)		0.56	HV
Nara Prei.	24	Tenri Air Quanty Monitoring Station (Tenri City)	9/19 ~ 9/20	0.56	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26	0.05	****
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.05	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.31	HV
			9/20 ~ 9/21		
		W. Lib C. IV d. Chill W. M. II	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		0.27	MV
_		(Yamaguchi City)			
•			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)	0.20	0.43	MV
	20				1,1
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	0.42	HV
TOKUSIIIIIa TTET.	23	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	0.42	11 V
W D 6	20	W. D. C. J. D. L. C. L. D. L. C. L.	10/10 ~ 10/17	0.20	107
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.39	MV
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	0.40	HV
Ehime Pref.	31		9/4 ~ 9/5		
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	1.0	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		0.34	MV
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	0.20	HV
Kumamoto Fiet.		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	J/11 ·- J/10	0.10	MV
1721 y azaki i 101.	33	(Miyazaki City)		0.10	1V1 V
			0/25 - 0/25		
v. 1. D. 3	2.5	Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	0.11	****
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	0.11	HV
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	tr(0.04)	HV
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

[6-6] o,p'-DDE /air (pg/m3)

Monitored year :2018

Detection Frequency (site): 36/37 (Missing value: 0)
Detection Frequency (sample): 36/37 (Missing value: 0)

Detection limit: 0.03 Quantification limit: 0.07

	stats
Geometric mean	0.10
Median	0.11
Maximum	0.38
Minimum	nd

T1	NI-	Maritana daisa	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.15	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	tr(0.06)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.05)	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.08	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.07	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.07	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.10	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.28	MV
	9	Chichijima Island	10/7 ~ 10/14	0.07	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.10	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.29	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.11	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.13	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.05)	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.13	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.38	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.06)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.09	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.03)	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.13	HV

T 1 22	N	W 2 12	Warm	season	A: 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.			9/12 ~ 9/13	0.24	HV
		(Osaka City)	9/13 ~ 9/14		
		Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	0.18	HV
, , ,		7,0	9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.13	HV
		,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.27	HV
ivara i ici.	24	Tenii Aii Quanty Montoring Station (Tenii City)	9/20 ~ 9/21	0.27	111
ci. D.c	25	OUNCE TAKED OF A COLUMN	9/25 ~ 9/26	. (0.05)	1137
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	tr(0.05)	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.10	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		0.12	MV
		(Tamagucin City)			
			8/21 ~ 8/28		
	28	28 Hagi Health and Welfare Center (Hagi City)		0.14	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	0.17	HV
101110111111111111111111111111111111111	2,	Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13	0.17	
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 10/17	0.12	MV
Kagawa 1 Ici.	30	Kagawa Prefecturai Puone Swimming Pool (Takamatsu City)		0.12	171 7
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	*************************	0.14	HV
Emme Prei.			9/4 ~ 9/5		
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.20	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		0.20	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	0.09	HV
		Science (Odo City)	10/3 ~ 10/4		
		No. 11 P. C. a. IV. St. a. C. D. IV. St.	9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment		tr(0.04)	MV
•		(Miyazaki City)			
			9/25 ~ 9/26	+	
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	0.09	HV
		Health (Kagoshima City)	9/27 ~ 9/28	0.07	** '
			8/27 ~ 8/28	-	
Okinawa Pref.	27	Cone Hado (Vunigami Villaga)		nd nd	HV
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

[9] Toxaphenes /air (pg/m3)

Monitored year :2018

 $\label{eq:continuous} Detection\ Frequency\ (site): 0/37\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 0/37\ (Missing\ value: 0)$

Detection limit: *0.6 Quantification limit: *1.3

	stats
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	NO	Monitored sites	Sampling dates	measured value	All sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	nd	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	nd	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	nd	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	nd	HV

Local communities	No	Monitored sites	Warm	Air sampler	
Local communities	110		Sampling dates	measured value	7 III Sumpler
		Only Lint Buffertual Comment Building Building 2 Amon	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	nd	HV
		(Osaka City)	9/13 ~ 9/14		
		2 Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	nd	HV
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	nd	HV
•			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	nd	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Similane Tier.	23	Okt National Field Rain Observatory (Okthosinnia Town)	9/27 ~ 9/28	iid	111
			9/18 ~ 9/19		
Hiroshima City	26	Hirochima City Volgetaiii Iunior High Sahaal (Hirochima City)		nd	HV
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	IIU	nv
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		nd	MV
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		nd	MV
		Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	nd	HV
			9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		nd	MV
	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.			9/4 ~ 9/5	nd	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	nd	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		nd	MV
-					
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	nd	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	2/11 2/10	nd	MV
,	33	(Miyazaki City)			271 7
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	nd	HV
ragosiiiila Fiel.	30	Health (Kagoshima City)		IIU	пу
			9/27 ~ 9/28		
Obinon B C	27	Constitute (Viniconi Villore)	8/27 ~ 8/28		****
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

 $[9\text{-}1]\ 2\text{-}endo, 3\text{-}exo, 5\text{-}endo, 6\text{-}exo, 8, 8, 10, 10\text{-}octachlorobornane}\ (Parlar-26)\ \ /air\ (pg/m3)$

Monitored year :2018

Detection Frequency (site): 12/37 (Missing value: 0)
Detection Frequency (sample): 12/37 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.4

	stats
Geometric mean	nd
Median	nd
Maximum	tr(0.3)
Minimum	nd

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	NO	Monitored sites	Sampling dates	measured value	All sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	tr(0.2)	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.2)	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	tr(0.2)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	nd	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	tr(0.2)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	tr(0.2)	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	tr(0.2)	HV

Y 1 1.1		W 2 12	Warm	season	4 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	tr(0.2)	HV
		(Osaka City)	9/13 ~ 9/14		
		Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	tr(0.2)	HV
, ,			9/28 ~ 9/29	` '	
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	nd	HV
		,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	tr(0.2)	HV
		Tomi Tim Quanty Monitoring Dunion (Tomi City)	9/20 ~ 9/21	4(0.2)	
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Similare 1 fer.	23	Oki National Acid Kain Observatory (Okinosinnia Town)	9/26 ~ 9/21	IId	11 V
Hiroshima City	26	Himshims City Valentsiii Issian High Cabaal (Hissabina City)	9/18 ~ 9/19	nd	HV
Hiroshina City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	na	пv
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		2.07
Yamaguchi Pref.	27	(Yamaguchi City)		nd	MV
		, ,			
			8/21 ~ 8/28		
	28	28 Hagi Health and Welfare Center (Hagi City)		nd	MV
		Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	tr(0.2)	HV
		Zinvironineman setences conter (Tokasinina ciky)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		nd	MV
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.	31		9/4 ~ 9/5	nd	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	tr(0.3)	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		tr(0.2)	MV
_	55				
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	nd	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment)/11	nd	MV
,		(Miyazaki City)			-:- - *
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	nd	HV
	30	Health (Kagoshima City)	9/27 ~ 9/28	iid	11 7
		+	8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
Okiliawa Prei.	31	Cape rieuo (Kuingann vinage)		IIU	п٧
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

 $[9\text{-}2]\ 2\text{-}endo, 3\text{-}exo, 5\text{-}endo, 6\text{-}exo, 8, 8, 9, 10, 10\text{-}nonachlorobornane}\ (Parlar-50)\ / air\ (pg/m3)$

Monitored year :2018

Detection Frequency (site): 2/37 (Missing value: 0)
Detection Frequency (sample): 2/37 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.5

	stats
Geometric mean	nd
Median	nd
Maximum	tr(0.2)
Minimum	nd

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	NO	Monitored sites	Sampling dates	measured value	Ali sampiei
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	nd	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	nd	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	nd	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	nd	HV

Local communities	No	Monitored sites	Warm season		Air sampler
	110		Sampling dates	measured value	An samplet
Osaka Pref.		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
	21	(Osaka City)	9/12 ~ 9/13	nd	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27	nd	
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28		HV
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	nd	HV
Robe City	23	Robe City Government Bunding (Robe City)	10/4 ~ 10/5	nu	11 4
N D C	2.4	The state of the Market State of The state of	9/18 ~ 9/19		1111
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	nd	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	nd	HV
•			9/20 ~ 9/21		
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment	0/21 0/20	nd	MV
rumagaem rren		(Yamaguchi City)			,
ŀ			8/21 ~ 8/28		
	20	H : H M I IW IC C (/ /H : C')	8/21 ~ 8/28	. (0.2)	107
	28	Hagi Health and Welfare Center (Hagi City)		tr(0.2)	MV
	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11	nd HV	
Tokushima Pref.		29 Tokushima Prefecturai Puolic Health, Pharmaceuticai and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12		HV
			9/12 ~ 9/13		
	30		10/10 ~ 10/17	nd	MV
Kagawa Pref.		Kagawa Prefectural Public Swimming Pool (Takamatsu City)			
	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	tr(0.2)	HV
Ehime Pref.			9/4 ~ 9/5		
2			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)		nd	HV
rukuoka Ptei.			9/11 ~ 9/12		пv
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		nd	MV
	34	Kumamoto Prefectural Institute of Public Health and Environmental Science (Udo City)	10/1 ~ 10/2		
Kumamoto Pref.			10/2 ~ 10/3	nd HV	HV
			10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	nd M	
Miyazaki Pref.	35				MV
,		(Miyazaki City)		-	
	36	Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City)	9/25 ~ 9/26	nd	HV
Kagoshima Pref.			9/26 ~ 9/27		
ragosiiiila Fiel.					
			9/27 ~ 9/28		
	_	37 Cape Hedo (Kunigami Village)	8/27 ~ 8/28	nd	
Okinawa Pref.	37		8/28 ~ 8/29		HV
			8/29 ~ 8/30		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

 $[9\text{-}3]\ 2,\!2,\!5,\!5,\!8,\!9,\!9,\!10,\!10\text{-}Nonachlorobornane}\ (Parlar\text{-}62)\ /air\ (pg/m3)$

Monitored year :2018

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

Detection limit : 0.2 Quantification limit : 0.4

	stats
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	unities No Monitored sites Warm season			Air sampler	
Local communities	NO	Monitored sites	Sampling dates	measured value	Ali sampiei
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	nd	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	nd	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	nd	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	nd	HV

Local communities	No	Monitored sites	Warm season		Air sampler
200ai communicies			Sampling dates	measured value	rin sampler
Osaka Pref.		One has being Dougle at and Commence of Doubling Doubling 2 Among	9/11 ~ 9/12		
	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	nd	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	nd	HV
		Tryogo Trefeetana Zinvironnienaa Tessearen Center (1866 City)	9/28 ~ 9/29		пу
			10/2 ~ 10/3		
v. 1 ~:	22	W. L. Civ. Ci.		,	****
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	nd	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	nd	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
		(Okinosiina 1041)	9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	nd	HV
imosimila City	20	Timosinina City Kokutaiji Junioi Trigii School (Filiosinina City)		IIG	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	8/21 ~ 8/28		
Yamaguchi Pref.	27			nd	MV
		(Tuningueni City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		nd	MV
		+	9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	nd	HV
rokusiiiiia rici.				IIU	111
			9/12 ~ 9/13 10/10 ~ 10/17		
** ** **	30		10/10 ~ 10/17	nd	MV
Kagawa Pref.		Kagawa Prefectural Public Swimming Pool (Takamatsu City)			
	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	nd	HV
Ehime Pref.			9/4 ~ 9/5		
			9/5 ~ 9/6		
	32	Omuta City Government Building (Omuta City)	9/10 ~ 9/11	nd	HV
Fukuoka Pref.			9/11 ~ 9/12		
		,	9/12 ~ 9/13		
			9/11 ~ 9/18		
C D C	22		9/11 ~ 9/18	,	107
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		nd	MV
	34	Kumamoto Prefectural Institute of Public Health and Environmental Science (Udo City)	10/1 ~ 10/2		
Kumamoto Pref.			10/2 ~ 10/3	nd HV	HV
			10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	nd MV	
Miyazaki Pref.	35				MV
, 1 101.		(Miyazaki City)			
	36	Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City)	9/25 ~ 9/26	nd	HV
Vhim D C					
Kagoshima Pref.			9/26 ~ 9/27		
		* **	9/27 ~ 9/28		
		7 Cape Hedo (Kunigami Village)	8/27 ~ 8/28		
Okinawa Pref.	37		8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		
		I	-:4/4bb		

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

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) nd : Not detected

[10] Mirex/air (pg/m3)

Monitored year :2018

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

Detection limit : 0.01 Quantification limit : 0.03

	stats
Geometric mean	0.09
Median	0.09
Maximum	0.20
Minimum	0.05

Local communities	No	Monitored sites	Warm season		Air sampler
Local communities	NO	Monitored sites	Sampling dates	measured value	All sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.06	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.05	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.07	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.09	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.06	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.05	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.07	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.11	MV
	9	Chichijima Island	10/7 ~ 10/14	0.10	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.11	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.09	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.07	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.06	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.09	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.08	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.09	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.08	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.20	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.08	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.09	HV

Local communities	No	No Monitored sites	Warm	Air sampler	
Local communities	110		Sampling dates	measured value	7 th sumpler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	0.10	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.07	HV
Hyogo Hen.		Tryogo Percetulai Environmentai Research Center (Robe City)	9/28 ~ 9/29	0.07	111
W. L. Cli.	22	W.L. Ch. C	10/2 ~ 10/3	0.07	****
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.07	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.10	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.05	HV
		, , , , , , , , , , , , , , , , , , , ,	9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Vokutaiii Junior High School (Hiroshima City)		0.13	HV
Hiroshima City	∠0	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.13	пv
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		0.12	MV
		(Tamagucin City)			
		28 Hagi Health and Welfare Center (Hagi City)	8/21 ~ 8/28	0.13	MV
	28				
			9/10 ~ 9/11		
Tokushima Pref.	20	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	0.10	HV
Tokusiiiiia Tiet.	29			0.10	11.
			9/12 ~ 9/13		
	30	30 Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17	0.06	MV
Kagawa Pref.					
	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	0.19	
Ehime Pref.			9/4 ~ 9/5		HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.13	HV
		,	9/12 ~ 9/13	****	
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)	9/11 ~ 9/16	0.16	MV
Saga Prei.	33	Saga Prefectural Environmental Research Center (Saga City)		0.16	IVI V
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	0.06	HV
		(as only)	10/3 ~ 10/4		
		MC LIB C . II C . C D III M II II	9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment		0.10	MV
•		(Miyazaki City)			
			9/25 ~ 9/26		
Vagashima Dr-f	36	Kagoshima Prefectural Institute for Environmental Research and Public		0.10	HV
Kagoshima Pref.	30	Health (Kagoshima City)	9/26 ~ 9/27	0.10	п٧
		·	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	0.09	HV
			8/29 ~ 8/30		
N-4- 1) D-44: £		(-i4-) :- bd 4b	-:4/4h		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[14] Polybromodiphenyl ethers(Br4~Br10)/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 31/37 (Missing value: 0)
Detection Frequency (sample): 31/37 (Missing value: 0)

Detection limit: *1.3

Quantification limit: *3.1

	stats
Geometric mean	4.0
Median	5.5
Maximum	24
Minimum	nd

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	NO	Monitored sites	Sampling dates	measured value	All sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	6.4	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	11	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	5.8	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	tr(1.5)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	8.8	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	8.6	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	5.8	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	14	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	24	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	4.3	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	11	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	3.1	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	5.1	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	7.6	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	6.4	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(2.3)	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	6.4	HV

Y 1 1.1		Monitored sites	Warm	season	4. 1
Local communities	No	Wolfitoled sites	Sampling dates	measured value	Air sampler
	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.			9/12 ~ 9/13	5.5	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	3.9	HV
,		7,0	9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	12	HV
		,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	6.1	HV
ivara i ici.	24	Tenii Aii Quanty Montoring Station (Tenii City)	9/20 ~ 9/21	0.1	111
			9/25 ~ 9/26		
Shimane Pref.	25	Oli National Asid Bain Observatory (Oliverations Towns)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	nd	HV
Sillilane Fier.	23	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	IIU	п٧
			9/27 ~ 9/28		
*** ** **			9/18 ~ 9/19		****
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	5.0	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		7.9	MV
		(Tuninguein City)			
			8/21 ~ 8/28		
	28	28 Hagi Health and Welfare Center (Hagi City)		4.7	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	7.4	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		9.6	MV
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	tr(2.2)	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	8.0	HV
i ukuoka i ici.	32	Omata City Government Bunding (Omata City)	9/12 ~ 9/13	6.0	111
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)	9/11 - 9/16	tr(3.0)	MV
Saga I Iei.	33	Saga Freiectural Environmental Research Center (Saga City)		u(3.0)	IVI V
			10/1 - 10/2		
V D. C	24	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	4.2	1137
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	4.2	HV
		·	10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	(Miyazaki City)		nd	MV
		, y			
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	T	
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	tr(1.6)	HV
		Ticarui (Ragosiilila City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		
		I.		L	

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[14-1] Tetrabromodiphenyl ethers/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 37/37 (Missing value: 0) Detection Frequency (sample): 37/37 (Missing value: 0) Detection limit: 0.02

Quantification limit: 0.05

	stats
Geometric mean	0.28
Median	0.26
Maximum	3.9
Minimum	0.05

Local communities	No	Monitored sites	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.08	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.35	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.07	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.20	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.08	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.18	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.16	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.80	MV
	9	Chichijima Island	10/7 ~ 10/14	0.45	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.79	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.86	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.27	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	3.9	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.10	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.22	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.15	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.22	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	1.2	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.42	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.17	HV

v 1 50		W 2 12	Warm	season	
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.			9/12 ~ 9/13	0.45	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.26	HV
, , , , , ,		7,0	9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.47	HV
		, , , , , , , , , , , , , , ,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.25	HV
1144411011		Tomi Tim Quanty Monitoring Dunion (Tomi City)	9/20 ~ 9/21	0.25	***
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.06	HV
Similatie 1 lei.	23	Oki National Acid Kain Observatory (Okinosinnia Town)	9/26 ~ 9/21	0.00	11 V
III. 11. Cit	26	Hr. 1: C: K1 ("L. H. 101 10L 11 C.)	9/18 ~ 9/19	0.20	1137
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.38	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		0.57	MV
		(g			
			8/21 ~ 8/28		
	28	28 Hagi Health and Welfare Center (Hagi City)		0.56	MV
		T-lunking Duff stood Duklin Hook Dhamas and all and	9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	0.29	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		1.5	MV
, and the second					
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.	31		9/4 ~ 9/5	0.29	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.85	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)	2/11 2/10	0.25	MV
Sugu i ici.	55	Bugu Freiecturu Environmentui Research Center (Bugu City)		0.23	111 1
			10/1 ~ 10/2	+	
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	0.08	HV
Kumamoto Fier.	34	Science (Udo City)		0.08	п٧
			10/3 ~ 10/4		
M. 110.0	25	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	0.22	107
Miyazaki Pref.	35	(Miyazaki City)		0.22	MV
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	0.08	HV
		. 6	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	0.05	HV
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

 $[14\text{-}1\text{-}1]\ 2\text{,}2\text{',}4\text{,}4\text{'-}Tetrabromodiphenyl ether (\#47)/air (pg/m3)}$

Monitored year :2018

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

Detection limit : 0.01 Quantification limit : 0.03

	stats
Geometric mean	0.19
Median	0.18
Maximum	3.5
Minimum	0.04

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	NO	Monitored sites	Sampling dates	measured value	Ali sampiei
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.08	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.24	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.05	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.15	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.05	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.10	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.10	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.57	MV
	9	Chichijima Island	10/7 ~ 10/14	0.31	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.63	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.52	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.18	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	3.5	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.07	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.17	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.11	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.15	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.80	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.35	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.12	HV

Local communities	No	Monitored sites	Warm	Air sampler	
Local communities	110		Sampling dates	measured value	All sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	0.30	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.16	HV
nyogo riei.	22	Hyogo Frerecturar Environmentar Research Center (Robe City)		0.10	п٧
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.36	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.18	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.05	HV
		, , , , , , , , , , , , , , , , , , , ,	9/27 ~ 9/28		
			9/18 ~ 9/19		
Him dring City	26	Historia City Valuatiii Issia Historia City		0.27	HV
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.27	пv
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		0.43	MV
		(Tuninguoni Oily)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		0.40	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	0.17	HV
101101111111111111111111111111111111111		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13	0.17	
			10/10 ~ 10/17		
IZ D. C	20	W D C (IDII: C : : D I/TI (C:)	10/10 ~ 10/17	0.54	MV
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.54	MV
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	0.23	HV
Ehime Pref.	31		9/4 ~ 9/5		
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.72	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.18	MV
			10/1 - 10/2	+	
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	0.05	HV
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	0.03	пν
			10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	(Miyazaki City)		0.14	MV
		(<u>)</u>			
		W 1: D C . II	9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	0.05	HV
-		Health (Kagoshima City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	0.04	HV
OKIIIAWA FIEL.	31	Cape ricao (Kumgami vinage)		0.04	п٧
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[14-2] Pentabromodiphenyl ethers/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 18/37 (Missing value: 0)
Detection Frequency (sample): 18/37 (Missing value: 0)

Detection limit : 0.08 Quantification limit : 0.20

	stats
Geometric mean	tr(0.08)
Median	nd
Maximum	4.1
Minimum	nd

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	NO	Monitored sites	Sampling dates	measured value	All sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(0.09)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	tr(0.17)	MV
	9	Chichijima Island	10/7 ~ 10/14	tr(0.09)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.19)	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.20	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	4.1	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.10)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	tr(0.16)	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.36	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	nd	HV

v 1		No Monitored sites	Warm	A :1	
Local communities	No		Sampling dates	measured value	Air sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21		9/12 ~ 9/13	tr(0.10)	HV
		(Osaka City)	9/13 ~ 9/14		
		Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	nd	HV
3.8			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	tr(0.13)	HV
		,	10/4 ~ 10/5	2(0.22)	
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	tr(0.08)	HV
rtara r rer.	2-1	remittin Quanty Monitoring Station (Tentre city)	9/20 ~ 9/21	11(0.00)	111
			9/25 ~ 9/26		
Shimane Pref.	25	Oli National Asid Bain Observatory (Oliverations Towns)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	nd	HV
Sillilane Fiel.	23	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	ilu	пу
			9/27 ~ 9/28		
*** ** **			9/18 ~ 9/19		****
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	nd	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		tr(0.10)	MV
		(Tuninguein City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		tr(0.10)	MV
		The state of the s	9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	tr(0.11)	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13	ĺ	
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		1.3	MV
		9 (
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	tr(0.08)	HV
2			9/5 ~ 9/6	1 (0.00)	
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/10 9/11	0.25	HV
Tukuoka 11e1.	32	Official City Government Building (Official City)	9/11 ~ 9/12	0.23	11 V
			9/12 ~ 9/13		
C Df	33	S Doofs at and Equipment and Doors of Contra (S City)	9/11 ~ 9/18	nd	MV
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		na	IVI V
			10/1 10/2		
W . B .	2.4	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		133.7
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	nd	HV
		·	10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	(Miyazaki City)		nd	MV
		, y			
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	1	
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	nd	HV
		Ticarui (Ragosiilila City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		
		1	0.00		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[14-2-1] 2,2',4,4',5-Pentabromodiphenyl ether (#99)/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 33/37 (Missing value: 0)
Detection Frequency (sample): 33/37 (Missing value: 0)

Detection limit : 0.02 Quantification limit : 0.04

	stats
Geometric mean	0.05
Median	0.05
Maximum	3.1
Minimum	nd

Y 1 22	NT	W 5 15	Warm	season	4: 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.05	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	tr(0.02)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.04	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	tr(0.02)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.06	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	tr(0.03)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.12	MV
	9	Chichijima Island	10/7 ~ 10/14	0.06	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.13	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.14	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.03)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	3.1	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.02)	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.04	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.04	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.06	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.11	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.25	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.05	HV

Local communities	No	Monitored sites	Warm	A: 1	
Local communities	No		Sampling dates	measured value	Air sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	0.06	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.04	HV
Tryogo Trei.		Tryogo Freteetara Environmentar Research Center (Robe City)	9/28 ~ 9/29	0.04	117
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/2 10/3	0.10	HV
Robe City	23	Robe City Government Building (Robe City)	10/4 ~ 10/5	0.10	11 V
N D C	24	The state of the Market State of The state of	9/18 ~ 9/19	0.05	HV
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.05	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.04	HV
			9/20 ~ 9/21		
		V	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)		0.06	MV
		(Yamaguchi City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		0.07	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	0.06	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 10/17	0.72	MV
ragawa 11ci.	30	Ragawa Prefecturai Public Swimming Pool (Takamatsu City)		0.72	141 4
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	0.05	HV
Ellille Fiel.	31			0.03	HV
			9/5 ~ 9/6		
F1 1 D 6	22		9/10 ~ 9/11	0.10	HV
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.18	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18	(0.00)	
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		tr(0.03)	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	tr(0.02)	HV
		(0 = 0 = 1.1)	10/3 ~ 10/4		
		Miyozaki Profactural Institute for Public Healthand Environ	9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)		tr(0.02)	MV
		(wiiyazaki City)			
		T I D C I I I I I I I I I I I I I I I I I	9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	nd	HV
		Health (Kagoshima City)	9/27 ~ 9/28		
			8/27 ~ 8/28	+	
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
Okiliawa Fiel.		(gam · mage)	8/29 ~ 8/30		***
			0/29 - 0/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) $\ensuremath{\text{tr}}$: detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[14-3] Hexabromodiphenyl ethers/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 9/37 (Missing value: 0)
Detection Frequency (sample): 9/37 (Missing value: 0)

Detection limit : 0.06 Quantification limit : 0.17

	stats
Geometric mean	nd
Median	nd
Maximum	1.5
Minimum	nd

Local communities	l communities No Monitored sites Warm s		season	Air sampler	
Local communities	NO	Monitored sites	Sampling dates	measured value	All sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(0.07)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	tr(0.09)	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	tr(0.08)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.49	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.19	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	nd	HV

T 1 22	M	N- Manitemed sites	Warm	A :1	
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
		O I VI D C . I C . D TE D TE O I	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	nd	HV
		(Osaka City)	9/13 ~ 9/14		
		2 Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	nd	HV
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	tr(0.06)	HV
Ť			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	tr(0.06)	HV
			9/20 ~ 9/21	, ,	
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
		,	9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	nd	HV
Throsinina City	20	Throshina City Rokutaiji Jumoi Trigii School (Throshina City)	9/20 ~ 9/21	nu	11 4
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment	0/21 - 0/20	nd	MV
i amagucini Fiei.	21	(Yamaguchi City)		na	IVI V
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)	8/21 ~ 8/28	nd	MV
	28	riagi ricann and wenare center (riagi city)		iid	IVI V
			0/10 0/11		
T 1 1: D 6	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/10 ~ 9/11	0.38	1117
Tokushima Pref.			9/11 ~ 9/12	0.38	HV
			9/12 ~ 9/13		
IZ D C	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17	1.5	MV
Kagawa Pref.				1.5	IVI V
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	nd	HV
Emme Frei.			9/5 ~ 9/6		11 4
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/10 ~ 9/11	nd	HV
rukuoka riei.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	IIU	пу
			9/12 ~ 9/13		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)	9/11 ~ 9/18	nd	MV
Saga Fiei.	33	Saga Frerecturar Environmentar Research Center (Saga City)		IId	IVI V
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	nd	HV
Kumamoto i iei.	34	Science (Udo City)		IIU	11 V
			10/3 ~ 10/4		
Miyogol-: Df	35	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	nd	M ₁
Miyazaki Pref.	33	(Miyazaki City)		nd	MV
			0/25 - 0/26		
Variationa D. C	26	Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	- 4	1177
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
01: 75 6	25		8/27 ~ 8/28	,	1777
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[14-3-1] 2,2',4,4',5,5'-Pentabromodiphenyl ether (#153)/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 6/37 (Missing value: 0)
Detection Frequency (sample): 6/37 (Missing value: 0)

Detection limit : 0.06 Quantification limit : 0.14

	stats
Geometric mean	nd
Median	nd
Maximum	0.97
Minimum	nd

T 1 22	NY	W 5 15	Warm	season	A. 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(0.06)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	tr(0.06)	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	nd	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.23	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.08)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	nd	HV

ocal communities	No	Monitored sites	Warm season		Air sampler
ocai communities	110	Wiolitored sites	Sampling dates	measured value	An sampler
	_	Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	۵,	9/12 ~ 9/13	nd	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	nd	HV	
Tryogo Tier.		Tryogo i refecturar Environmentar Research Center (Robe City)	9/28 ~ 9/29	na	11.
**			10/2 ~ 10/3		****
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	nd	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	nd	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Similario I Iol.	22	Old Francisco Field Paint Observatory (Okinosinina Town)	9/27 ~ 9/28	iid.	111
III II CI	26	HE IS CONTRACTED TO THE CONTRACT OF THE CONTRA	9/18 ~ 9/19	,	1111
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	nd	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27			nd	MV
-		(Yamaguchi City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)	0/21 0/20	nd	MV
	20	riagi ricatai and wentare conter (riagi enty)		na	141 4
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)		t-(0.12)	HV
Tokusnima Pref.			9/11 ~ 9/12	tr(0.12)	HV
		` *′	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.97	MV
			9/3 ~ 9/4		
Ehime Pref.	31	1 Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	nd	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	nd	HV
I undona I Ioi.	52	omata etty coverament zanamg (omata etty)	9/12 ~ 9/13	na .	
			9/11 ~ 9/18		
C D C	22		9/11 ~ 9/18	,	107
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		nd	MV
			10/1 10/2		
17 . B.C	~ .	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	,	***
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	nd	HV
		(540 GNJ)	10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	, ·		nd	MV
		(Miyazaki City)			
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	nd	HV
	50	Health (Kagoshima City)	9/27 ~ 9/28		•••
			8/27 ~ 8/28		
Oldinaria Barel	27	C II-1- (V; V:II)			1137
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr: detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

⁽Note 6) * : indicates the sum value of the Quantification [Detection] limits of each congener.

 $[14\text{-}3\text{-}2]\ 2\text{,}2\text{',}4\text{,}4\text{',}5\text{,}6\text{'-}Pentabromodiphenyl ether } (\#154)/air\ (pg/m3)$

Monitored year :2018

Detection Frequency (site): 3/37 (Missing value: 0)
Detection Frequency (sample): 3/37 (Missing value: 0)
Detection limit: 0.05

 $Quantification \ limit: 0.12$

	stats
Geometric mean	nd
Median	nd
Maximum	0.40
Minimum	nd

Local communities	No	No Monitored sites -	Warm		Air sampler
Local communities	110		Sampling dates	measured value	7 in sumpler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	nd	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	nd	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.20	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	nd	HV

Local communities	No	Monitored sites	Warm season		Air sampler
communices	110	Tromotod stos	Sampling dates	measured value	sumpler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21		9/12 ~ 9/13	nd	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	nd	HV
Hyogo Hei.	22	Tryogo Frerecturar Environmentar Research Center (Robe City)		nu .	11 V
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	nd	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	nd	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
		26 Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/18 ~ 9/19		
Hiroshima City	26		9/19 ~ 9/20	nd	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		nd	MV
		(Tamagucin City)			
			8/21 ~ 8/28		
	28	28 Hagi Health and Welfare Center (Hagi City)		nd	MV
	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/10 ~ 9/11		
Tokushima Pref.			9/11 ~ 9/12	tr(0.08)	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.40	MV
	31	31 Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.			9/4 ~ 9/5	nd	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	nd	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		nd	MV
		Vumamata Profestural Institute of Public Harlet and English	10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	nd	HV
		Science (Udo City)	10/3 ~ 10/4		
		Minaraki Profestural Institute for Dukli- II-lik d Facilian	9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment		nd	MV
-		(Miyazaki City)			
		77 11 70 11 12 11 12 11 12 11 12 11 12 11	9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	nd	HV
ragosimila fiel.		Health (Kagoshima City)	9/27 ~ 9/28	-	
_					
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/27 ~ 8/28 8/28 ~ 8/29	nd	HV

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr: detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[14-4] Heptabromodiphenyl ethers/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 16/37 (Missing value: 0)
Detection Frequency (sample): 16/37 (Missing value: 0)

Detection limit : 0.08 Quantification limit : 0.20

	stats
Geometric mean	tr(0.09)
Median	nd
Maximum	1.3
Minimum	nd

T 1 22	N	W 2 12	Warm	season	A. 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	tr(0.13)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.22	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.38	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.29	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.19)	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.30	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	nd	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.77	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.21	HV

v 1		No. Monitored sites	Warm	4: 1	
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21		9/12 ~ 9/13	tr(0.10)	HV
		(Osaka City)	9/13 ~ 9/14		
		Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	nd	HV
, , , , , ,		7.0	9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.24	HV
		,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.26	HV
Nara i ici.	24	Tenit Air Quanty Wontoring Station (Tenit City)	9/20 ~ 9/21	0.20	111
Shimane Pref.	25	Oki National Asid Bair Observatory (Okinashima Tanan)	9/25 ~ 9/26	nd	HV
Sililiale Fiel.	23	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	IIU	п٧
			9/27 ~ 9/28		
***			9/18 ~ 9/19	(0.00)	
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	tr(0.09)	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		nd	MV
		(Tuningueni City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		nd	MV
	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		
Tokushima Pref.			9/11 ~ 9/12	1.3	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.74	MV
Ü		,			
	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.			9/4 ~ 9/5	nd	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	tr(0.11)	HV
i ukuoka i ici.	32	Onata City Government Bunding (Onata City)	9/12 ~ 9/13	u(0.11)	11 4
			9/12 ~ 9/13		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)	9/11 - 9/18	nd	MV
Saga I Ici.	33	Saga i refecturar Environmentar Research Center (Saga City)		IIu	1V1 V
			10/1 - 10/2		
V Du C	24	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	t=(0.12)	1177
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	tr(0.12)	HV
			10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	(Miyazaki City)		nd	MV
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

 $[14\text{-}4\text{-}1]\ 2,2',3,3',4,5',6'\text{-Pentabromodiphenyl ether } (\#175)/\text{air } (pg/m3)$

Monitored year :2018

Detection Frequency (site): 0/37 (Missing value: 0)
Detection Frequency (sample): 0/37 (Missing value: 0)
Detection limit: 0.06

 $Quantification \ limit: 0.15$

	stats
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No	Monitored sites	Warm :	season	Air sampler
Local communities	140	Montored sites	Sampling dates	measured value	All samples
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	nd	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	nd	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	nd	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	nd	HV

ocal communities	No	Monitored sites	Warm	season	Air sampler
ocar communities	140	Wontored sites	Sampling dates	measured value	An sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	ξ, ξ	9/12 ~ 9/13	nd	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	nd	HV	
Tryogo Tici.	22	Tryogo Fretecturai Environmentai Rescaren Center (Robe City)		nu	111
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	nd	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	nd	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Simmane 1 ici.	23	Oki ivational Acid Ram Observatory (Okinosimna Town)		nu	111
			9/27 ~ 9/28		
TT: 1: ~:		W 1. C. W 1 V 1 V 1	9/18 ~ 9/19		****
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	nd	HV
			9/20 ~ 9/21		
		V	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		nd	MV
g		(Yamaguchi City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)	0/21 0/20	nd	MV
	20	riagi ricatai and wentate center (riagi eny)		na	111 1
			0/10 0/11		
m 1 1: p c	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		****
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	nd	HV
		(9/12 ~ 9/13		
			10/10 ~ 10/17	_	
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		nd	MV
	31	31 Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	nd	HV
Ehime Pref.			9/4 ~ 9/5		
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	nd	HV
I undona I Ioi.	32	omata etty coveriment Banang (omata etty)	9/12 ~ 9/13		
			9/11 ~ 9/18		
C D C	22		9/11 ~ 9/18	,	107
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		nd	MV
			10/1 - 10/2		
77 . D.C	24	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	,	1111
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	nd	HV
			10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	· ·		nd	MV
		(Miyazaki City)			
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	nd	HV
		Health (Kagoshima City)	9/27 ~ 9/28		
OL: B.C	25	C H I W : WH	8/27 ~ 8/28	,	****
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

⁽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. (Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler (Note 4) nd : Not detected

 $[14\text{-}4\text{-}2]\ 2,2',3,4,4',5',6'\text{-Pentabromodiphenyl ether } (\#183)/\text{air } (pg/m3)$

Monitored year :2018

Detection Frequency (site): 18/37 (Missing value: 0) Detection Frequency (sample): 18/37 (Missing value: 0) Detection limit: 0.04

Quantification limit: 0.11

	stats
Geometric mean	tr(0.04)
Median	nd
Maximum	0.47
Minimum	nd

Local communities	No	Monitored sites	Warm	season	A in complex
Local communities	NO	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	tr(0.04)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	tr(0.04)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(0.10)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	tr(0.09)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.14	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.04)	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.11	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	nd	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.22	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	tr(0.05)	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	tr(0.05)	HV

Local communities	No	Monitored sites	Warm season		Air sampler
Local communices	Homored sites		Sampling dates	measured value	7 in sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	(Osaka City)	9/12 ~ 9/13	tr(0.05)	HV
		(Osaka City)	9/13 ~ 9/14		
		22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	nd	HV
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	tr(0.07)	HV
		, , , , , , , , , , , , , , , , , , ,	10/4 ~ 10/5		
			9/18 ~ 9/19		
N D C	2.4	The state of the Market of the state of the		. (0.00)	****
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	tr(0.09)	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
		·	9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	tr(0.06)	HV
imosiiiiia City	20	Hirosinina City Kokutaiji Junioi High School (Hirosinina City)	9/19 ~ 9/20	ш(0.00)	11 V
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		2077
Yamaguchi Pref.	27	(Yamaguchi City)		nd	MV
		, ,			
			8/21 ~ 8/28	_	
	28	Hagi Health and Welfare Center (Hagi City)		nd	MV
	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/10 ~ 9/11	0.40	
Tokushima Pref.			9/11 ~ 9/12		HV
		Zirviioiiiiiii Beleinees Ceiner (Tokusiiiiiii City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.47	MV
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	nd	
Ehime Pref.	31		9/4 ~ 9/5		HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	tr(0.06)	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		nd	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	tr(0.05)	HV
		Science (Out City)	10/3 ~ 10/4	1	
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		_
Miyazaki Pref.	35			nd	MV
		(Miyazaki City)			
		V	9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	nd	HV
-		Health (Kagoshima City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
		1 (1 0 1 10)	8/29 ~ 8/30	-	
		(site) is based on the number of sites, thus means (the number of detected		.	

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value. (Note 5) nd : Not detected

[14-5] Octabromodiphenyl ethers/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 34/37 (Missing value: 0)
Detection Frequency (sample): 34/37 (Missing value: 0)

Detection limit : 0.04 Quantification limit : 0.11

	stats
Geometric mean	0.15
Median	0.14
Maximum	1.3
Minimum	nd

T1	N-	Manitana Laitan	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.15	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	tr(0.09)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.11	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.19	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.14	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.26	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.57	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.33	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.24	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.59	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.09)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	tr(0.10)	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.04)	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.07)	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.11	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	1.1	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.24	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.13	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.27	HV

Local communities	No	No Monitored sites	Warm	season	Air sampler
Local communities	140		Sampling dates	measured value	All sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	0.20	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.13	HV
, -8			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/2 10/3	0.38	HV
Robe City	23	Robe City Government Bunding (Robe City)	10/4 ~ 10/5	0.56	111
			9/18 ~ 9/19		
Nara Pref.	24	Touri Air Coulity Monitoring Station (Touri City)		0.44	HV
Nara Prei.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.44	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.19	HV
			9/20 ~ 9/21		
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		0.12	MV
C		(Yamaguchi City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)	0/21 0/20	tr(0.10)	MV
	20	Thag Fredith and Westare Center (Tags City)		u(0.10)	141 4
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	1.3	HV
Tokusiiiiia Tiet.	23	Environmental Sciences Center (Tokushima City)		1.5	11 V
			9/12 ~ 9/13		
	20	W. D. C. J. I. D. L. C. L. D. L. C. L.	10/10 ~ 10/17	0.44	207
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.44	MV
			0/2 0/4		
Eli D. C	21	El. B.C. IC (N. B.: 100° (H. ". C'.)	9/3 ~ 9/4	. (0.00)	****
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	tr(0.09)	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.26	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		0.11	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34		10/2 ~ 10/3	0.18	HV
		Science (Udo City)	10/3 ~ 10/4		
		No. 11 P. C. at Market British Transfer	9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment		tr(0.05)	MV
-		(Miyazaki City)			
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	tr(0.06)	HV
		Health (Kagoshima City)	9/27 ~ 9/28	4(0.00)	***
			8/27 ~ 8/28		
Okinawa Pref.	37	Cono Hado (Vunigami Villaga)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	nd nd	HV
Okinawa Prei.	3/	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	нv
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd: Not detected

[14-6] Nonabromodiphenyl ethers/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 31/37 (Missing value: 0)
Detection Frequency (sample): 31/37 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.4

	stats
Geometric mean	0.5
Median	0.7
Maximum	3.0
Minimum	nd

Local communities	No	Monitored sites	Warm	season	A :1
Local communities	NO	Momtored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.9	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	1.2	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.8	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	tr(0.3)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	1.1	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	1.2	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.7	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	1.5	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	3.0	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.5	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	tr(0.3)	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.4	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.5	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	1.6	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	1.0	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.3)	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.8	HV

Local communities	No	Monitored sites	Warm s		Air sampler
socur communities	110	Wontored Sies	Sampling dates	measured value	7 th Sumpler
		Onder Leight Burfactural Community Building Building 2 Amoun	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	0.7	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.4	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	1.6	HV
noce on	25	Those only dovernment Bunding (1860) only	10/4 ~ 10/5	1.0	
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)		0.9	HV
Nara Fier.	24	Tellit Ali Quanty Monitoring Station (Tellit City)	9/19 ~ 9/20	0.9	пу
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	26 Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.7	HV
		9/20 ~ 9/21			
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		1.0	MV
· ·		(Yamaguchi City)			
-			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)	0/21 0/20	0.5	MV
	20			0.5	112 1
			9/10 ~ 9/11		
Tokushima Pref.	20	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)		1.1	HV
i okusmina Prei.	29		9/11 ~ 9/12	1.1	11 4
			9/12 ~ 9/13		
	20		10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.7	MV
		31 Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4		
Ehime Pref.	31		9/4 ~ 9/5	tr(0.3)	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	1.0	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		tr(0.3)	MV
Ü					
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	0.6	HV
		Science (Udo City)	10/3 ~ 10/4	***	
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	nd	MV
wiiyazaki fiel.	33	(Miyazaki City)		IIU	IVI V
			0/25 0/25		
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	(0.0)	
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	tr(0.2)	HV
		. 5	9/27 ~ 9/28		
			8/27 ~ 8/28		
			0/2/ 0/20		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[14-7] Decabromodiphenyl ether/air (pg/m3)

Monitored year :2018

Detection Frequency (site) : 31/37 (Missing value : 0)
Detection Frequency (sample) : 31/37 (Missing value : 0)

Detection limit : 0.8 Quantification limit : 2.0

	stats
Geometric mean	2.6
Median	3.4
Maximum	19
Minimum	nd

T1	NI.	Maritana daitan	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	5.1	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	9.6	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	4.5	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	tr(0.8)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	6.9	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	6.2	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	3.4	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	11	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	19	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	3.4	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	tr(1.9)	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	2.3	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	4.2	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	3.6	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	3.7	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(1.0)	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	4.8	HV

Local communities	No	Monitored sites	Warm	season	Air sampler
Locar communities	110	Monitored sites	Sampling dates	measured value	7 III Sumplei
		Only Lint Deck at and Comment Building Duilding 2 Among	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	3.9	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	3.0	HV
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	9.5	HV
•			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	4.1	HV
		()	9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Simmane 1 ici.	23	Oki Ivational Acid Rain Observatory (Okinosinnia Town)	9/27 ~ 9/28	IId	11 V
			9/18 ~ 9/19		
Hiroshima Cit	26	Historhima City Volastaiii Ismios High Sahaal (Historhima City)		2.5	HV
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	3.5	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		6.1	MV
		(g.,			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		3.4	MV
		Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	2.9	HV
		Environmental Sciences center (Tokusinina city)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		3.4	MV
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	tr(1.4)	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	5.5	HV
		g(9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)	<i>3/11 3/10</i>	2.2	MV
Suga 1 Ten	55	Sugar Percental Environmental resourch Conter (Sugar City)		2.2	111 1
			10/1 ~ 10/2		
Kumamoto Pref	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	3.2	HV
Kumamoto Pref.	J 4	Science (Udo City)		3.4	11 V
			10/3 ~ 10/4		
Mr. Lin c	25	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	,	107
Miyazaki Pref.	35	(Miyazaki City)		nd	MV
			0/05 0/05		
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	tr(1.2)	HV
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[17] Pentachlorobenzene/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 37/37 (Missing value: 0)
Detection Frequency (sample): 37/37 (Missing value: 0)
Detection limit: 0.08

 $Quantification \ limit: 0.22$

	stats
Geometric mean	59
Median	61
Maximum	100
Minimum	30

T1iti	M-	Manitana daritan	Warm	season	A :1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	48	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	41	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	35	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	56	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	61	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	59	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	66	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	98	MV
	9	Chichijima Island	10/7 ~ 10/14	33	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	58	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	88	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	40	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	96	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	49	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	78	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	74	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	67	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	77	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	49	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	72	HV

ocal communities	No	Monitored sites	Warm season		Air sampler
Joean Communities	110	Wiolitored sites	Sampling dates	measured value	An sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	, , , , , , , , , , , , , , , , , , ,	9/12 ~ 9/13	69	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	43	HV
Tryogo Tier.		Hyogo Frerectural Environmental Research Center (Robe City)	9/28 ~ 9/29	43	111
**			10/2 ~ 10/3	0.7	****
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	85	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	90	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	33	HV
Similanc 1 ici.	23	Oki Ivational Acid Kain Observatory (Okinosinina Town)		33	111
			9/27 ~ 9/28		
*** ** **			9/18 ~ 9/19	400	****
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	100	HV
			9/20 ~ 9/21		
		W I'D C . II CD II' II II II'	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		48	MV
Ü		(Yamaguchi City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)	0/21 0/20	49	MV
	20	Hagi Health and Welfare Center (Hagi City)		49	IVI V
	•	Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	69	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		61	MV
ŭ.					
			9/3 ~ 9/4		
Ehime Pref.	31	31 Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	75	HV
Ellillic I Ici.	31			13	11 V
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	75	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		61	MV
-					
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	69	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Mr. I'D c	25	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	25	107
Miyazaki Pref.	35	(Miyazaki City)		35	MV
		V 3			
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36		9/26 ~ 9/27	50	HV
		Health (Kagoshima City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	30	HV
Okillawa 1 ICI.	31	cape fredo (Kuniganii vinage)		30	11 V
		(site) is based on the number of sites, thus means (the number of detected	8/29 ~ 8/30		

⁽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.
(Note 3) HV: High Volume Air Sampler, MV: Medium Volume Air Sampler
(Note 4) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[20] Total Polychlorinated Naphthalenes/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 37/37 (Missing value: 0)
Detection Frequency (sample): 37/37 (Missing value: 0)
Detection limit: *0.2

Quantification limit: *0.5

	stats
Geometric mean	86
Median	110
Maximum	590
Minimum	5.3

Local communities	No	Monitored sites	Warm		Air sampler
Local communities	140	Wiointoled Sites	Sampling dates	measured value	ran sampiei
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	170	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	23	н٧
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	18	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	78	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	31	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	63	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	100	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	130	MV
	9	Chichijima Island	10/7 ~ 10/14	26	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	78	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	160	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	71	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	150	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	20	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	110	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	160	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	110	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	140	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	74	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	120	HV

Local communities	No	Monitored sites	Warm season		Air sampler
Local communities	140	WOINGIEU SILES	Sampling dates	measured value	An sampler
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
		(Osaka City)	9/12 ~ 9/13	110	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	87	HV
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	130	HV
,		, ,,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	440	HV
		()	9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	6.7	HV
Similanc 1 ici.	23	Oki i vational Acid Rain Observatory (Okinosinina Town)	9/27 ~ 9/28	0.7	111
***			9/18 ~ 9/19		****
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	240	HV
			9/20 ~ 9/21		
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		480	MV
		(Yamaguchi City)			
			0/21 0/20		
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		420	MV
		TI II D C (IDIII II III DI) C I I	9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	590	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 10/17	330	MV
Kagawa 1 Ici.	30	Ragawa Prefecturai Public Swimming Pool (Takamatsu City)		330	IVI V
			9/3 ~ 9/4		
Ehime Pref.	31	Elima Professional Community Name Project Office (Herriton City)		130	HV
Emme Prei.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	130	нv
			9/5 ~ 9/6		
			9/10 ~ 9/11	440	****
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	110 HV	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		200	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	56	HV
		Science (Odo City)	10/3 ~ 10/4	[
		Minarali Danfartanal Institute for D. 11. II. 14. 15.	9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment		19	MV
		(Miyazaki City)			
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	-	
			9/26 ~ 9/27	24	HV
	50	Health (Kagoshima City)	9/27 ~ 9/28	27	11 4
				-	
Oleinanna Dua C	27	Constitute (Vanious) Villes)	8/27 ~ 8/28	<i>5</i> 2	1137
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	5.3	HV
	l		8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[20-1] Monochlorinated Naphthalenes/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 37/37 (Missing value: 0)
Detection Frequency (sample): 37/37 (Missing value: 0)
Detection limit: 0.04

Quantification limit: 0.04

	stats
Geometric mean	53
Median	71
Maximum	450
Minimum	2.9

Local communities	No	Monitored sites	Warm season		Air sampler
Local communices	110	Monitored sites	Sampling dates	measured value	7 III Sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	120	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	14	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	12	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	54	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	18	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	42	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	70	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	72	MV
	9	Chichijima Island	10/7 ~ 10/14	4.7	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	49	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	88	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	43	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	98	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	16	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	69	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	120	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	76	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	77	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	48	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	86	HV

Local communities	No	Monitored sites	Warm season		Air sampler	
ocai communities	110	Wiolikored sites	Sampling dates	measured value	Air sampier	
Osaka Pref.		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12			
	21	Ş, Ş	9/12 ~ 9/13	72	HV	
		(Osaka City)	9/13 ~ 9/14			
			9/26 ~ 9/27			
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	64 HV	HV	
		Tryogo Frerectural Environmental Research Conter (Robe City)	9/28 ~ 9/29		11.	
**		7	10/2 ~ 10/3		****	
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	74	HV	
			10/4 ~ 10/5			
			9/18 ~ 9/19			
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	350	HV	
			9/20 ~ 9/21			
			9/25 ~ 9/26			
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	4.2	HV	
Similanc 1 ici.	23	Oki ivational Acid Rain Observatory (Okinosinina Town)		7.2	11 V	
			9/27 ~ 9/28			
			9/18 ~ 9/19	4.40		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	140	HV	
			9/20 ~ 9/21			
		W. Line Co. IV do a Chilly W. H. Line Co.	8/21 ~ 8/28			
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		260	MV	
		(Yamaguchi City)				
ŀ			8/21 ~ 8/28			
	20	H . H 14 1W IC C + (H . C.)	8/21 ~ 8/28	100	107	
	28	Hagi Health and Welfare Center (Hagi City)		180 MV	MV	
	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11	450		
Tokushima Pref.			9/11 ~ 9/12		HV	
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13			
	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17	270	MV	
Kagawa Pref.						
		g				
			9/3 ~ 9/4			
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)		81	HV	
Emme Prei.			9/4 ~ 9/5	81	HV	
			9/5 ~ 9/6			
			9/10 ~ 9/11			
Fukuoka Pref.	32	2 Omuta City Government Building (Omuta City)	9/11 ~ 9/12	71	HV	
			9/12 ~ 9/13			
			9/11 ~ 9/18			
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		140	MV	
Saga i ici.						
			10/1 ~ 10/2			
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental		38	HV	
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	38	нv	
		· ·	10/3 ~ 10/4			
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18			
Miyazaki Pref.	35	· ·		9.8	MV	
		(Miyazaki City)				
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	15	HV	
Kagoshima Pref.	36		9/26 ~ 9/27			
goomma i ici.	50	Health (Kagoshima City)	9/27 ~ 9/28	1.5	11 4	
	-		8/27 ~ 8/28			
Okinawa Pref.	37	7 Cape Hedo (Kunigami Village)	8/28 ~ 8/29	2.9	HV	
			8/29 ~ 8/30			

⁽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. (Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[20-2] Monochloronaphthalenes/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 37/37 (Missing value: 0)
Detection Frequency (sample): 37/37 (Missing value: 0)
Detection limit: 0.04

Quantification limit: 0.04

	stats
Geometric mean	16
Median	18
Maximum	190
Minimum	1.2

Local communities	No	Monitored sites	Warm season		Air sampler
Local communities	NO	Wontored sites	Sampling dates	measured value	All sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	49	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	6.7	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	3.2	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	14	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	5.5	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	12	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	18	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	20	MV
	9	Chichijima Island	10/7 ~ 10/14	2.8	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	15	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	31	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	18	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	25	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	2.0	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	15	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	26	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	19	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	22	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	18	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	21	HV

ocal communities	No	Monitored sites	Warm season		Air sampler
ocai communities	110	Wiolitored sites	Sampling dates	measured value	An sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	ξ, ξ	9/12 ~ 9/13	16	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	12	HV	
Tryogo Tier.		Tryogo Freiecturai Environmentai Researen Contei (Robe City)	9/28 ~ 9/29	12	11.
**			10/2 ~ 10/3		****
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	13	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	33	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	25 Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	1.3	HV
Simmane 1 ter.	23	Oki National Field Rain Observatory (Okinosinina Town)		1.5	111
			9/27 ~ 9/28		
TT: 1: ~:		W 1. C. W 1 V 1.	9/18 ~ 9/19		****
Hiroshima City	26	26 Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	44	HV
			9/20 ~ 9/21		
		V	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		170	MV
Ü		(Yamaguchi City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)	0/21 0/20	190	MV
	20	riagi ricatti and werrare center (riagi City)		190	IVI V
		Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		****
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	110	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		43	MV
ŭ.					
			9/3 ~ 9/4		
Ehime Pref.	31	31 Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	32	HV
Limite Free.				32	п٧
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	19	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		41	MV
-					
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	10	HV
	J .	Science (Udo City)	10/3 ~ 10/4		•••
			9/11 ~ 9/18		
Mr. I'D c	25	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	4.5	107
Miyazaki Pref.	35	(Miyazaki City)		4.5	MV
		V 3"" - 97			
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36		9/26 ~ 9/27	4.7	HV
		Health (Kagoshima City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	1.2	HV
Okiliawa 1 ICI.	31	cape freuo (Kuniganii vinage)		1.2	11 V
			$8/29 \sim 8/30$ sites/the number of s		

⁽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. (Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[20-3] Dichloronaphthalenes/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 37/37 (Missing value: 0)
Detection Frequency (sample): 37/37 (Missing value: 0)
Detection limit: 0.03

Quantification limit: 0.09

	stats
Geometric mean	5.9
Median	6.1
Maximum	34
Minimum	0.68

T1	NI.	No. Monitored sites	Warm season		A :1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	3.2	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	1.2	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	1.4	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	3.6	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	3.7	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	5.0	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	6.4	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	21	MV
	9	Chichijima Island	10/7 ~ 10/14	12	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	5.8	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	15	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	4.7	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	13	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	1.1	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	11	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	6.1	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	8.0	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	10	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	5.8	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	5.7	HV

ocal communities	No	Monitored sites	Warm	season	Air sampler
ocai communities	140	Wolntored sites	Sampling dates	measured value	All sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	(Osaka City)	9/12 ~ 9/13	9.9	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	4.4	HV
, , , , , , , ,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/2 10/3	16	HV
Kobe City	23	Robe City Government Building (Robe City)		10	п٧
			10/4 ~ 10/5		
N D C	2.4	m the output to the death of the total	9/18 ~ 9/19	1.5	****
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	15	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.68	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	15	HV
•			9/20 ~ 9/21		
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment	0/21 0/20	31	MV
r umuguem r rer.	-/	(Yamaguchi City)		31	111 1
			8/21 ~ 8/28		
	20	H : H 14 1W 16 C (/H : C:)	8/21 ~ 8/28	24	107
	28	Hagi Health and Welfare Center (Hagi City)		34	MV
		Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		
Tokushima Pref.	29 Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	10	HV	
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	20	30 Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 10/17	7.9	MV
Kagawa 1 Ici.	30			7.9	IVI V
			9/3 ~ 9/4		
Ehime Pref.	31 E	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	5.2	HV
			9/5 ~ 9/6	i	
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)		8.8	HV
Tukuoka Hen.	32	Official City Government Building (Official City)	9/11 ~ 9/12	0.0	11 V
			9/12 ~ 9/13		
	22		9/11 ~ 9/18	10	3.67
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		10	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	4.5	HV
		Selence (Cuo City)	10/3 ~ 10/4		
		Miyazaki Prafactural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment		2.1	MV
•		(Miyazaki City)			
		 	9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	2.0	HV
- Lugosimila i ici.	50	Health (Kagoshima City)	9/27 ~ 9/28	2.0	11 4
Olainanna Dua C	27	C H-d- (V; Vill)	8/27 ~ 8/28	0.70	1117
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	0.79	HV
			8/29 ~ 8/30 sites/the number of s		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[20-4] Trichloronaphthalenes/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 37/37 (Missing value: 0)
Detection Frequency (sample): 37/37 (Missing value: 0)
Detection limit: 0.03

Quantification limit: 0.09

	stats
Geometric mean	5.4
Median	6.6
Maximum	33
Minimum	0.40

Local communities	No Monitored sites		Warm s		Air sampler
200m communices	110	Wolfford Sites	Sampling dates	measured value	7 m sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	1.6	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.90	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	1.5	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	5.0	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	3.1	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	3.1	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	4.6	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	15	MV
	9	Chichijima Island	10/7 ~ 10/14	6.6	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	6.6	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	22	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	4.3	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	7.9	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.79	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	16	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	6.3	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	6.6	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	15	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	2.3	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	9.2	HV

Local communities	No	Monitored sites	Warm season		Air sampler
Joean Communities	110	Wiolitored sites	Sampling dates	measured value	An sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		_
Osaka Pref.	21	ξ, ξ	9/12 ~ 9/13	13	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	5.4	HV	
Tryogo Tici.	22	Tryogo Fretecturai Environmentai Rescaren Center (Robe City)		5.4	111
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	20	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	33	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	25 Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.41	HV
Similane i ici.	23	OKI I MAIORAL FIELD RAIN OUSCI VALOLY (OKINOSIIIIIA TOWII)		0.71	11 4
			9/27 ~ 9/28		
TT: 1: ~:		W 1. C. W 1 V 1.	9/18 ~ 9/19	20	****
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	29	HV
			9/20 ~ 9/21		
		V	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		16	MV
· ·		(Yamaguchi City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)	0/21 0/20	14	MV
	20	riagi ricatai and wentate center (riagi eny)		1-7	141 4
			0/10 0/11		
m 1 1: p c	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11	10	****
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	12	HV
		(9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		6.0	MV
			9/3 ~ 9/4		
Ehime Pref.	31	1 Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	9.3	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	11	HV
I undona I Ioi.		omata etty coveriment Banang (omata etty)	9/12 ~ 9/13	••	
			9/11 ~ 9/18		
C D C	22		9/11 ~ 9/18		3.637
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		6.6	MV
			10/1 10/2		
77 . D.C	24	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	2.0	1111
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	2.8	HV
			10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	· ·		2.0	MV
		(Miyazaki City)			
		W. II. D. C. IV. St. C. T ID	9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	2.1	HV
		Health (Kagoshima City)	9/27 ~ 9/28	===	
			8/27 ~ 8/28		
Oldinaria Barel	27	C II-1- (V; V:II)		0.40	1137
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	0.40	HV
	l		8/29 ~ 8/30		

⁽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. (Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[20-5] Tetrachloronaphthalenes/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 37/37 (Missing value: 0)
Detection Frequency (sample): 37/37 (Missing value: 0)
Detection limit: 0.01

 $Quantification \ limit: 0.04$

	stats
Geometric mean	0.94
Median	1.3
Maximum	11
Minimum	0.04

Local communities	No	Monitored sites	Warm season		Air sampler	
Local communities	140	Wolffoled Sites	Sampling dates	measured value	An sampler	
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.23	MV	
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	0.13	HV	
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.33	HV	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	1.2	MV	
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.39	MV	
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.54	MV	
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.76	MV	
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	2.2	MV	
	9	Chichijima Island	10/7 ~ 10/14	0.22	MV	
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	1.5	HV	
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	3.2	MV	
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	1.2	HV	
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	1.7	HV	
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.13	HV	
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	2.6	HV	
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	1.2	MV	
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	1.5	HV	
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	11	MV	
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.33	HV	
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	1.5	HV	

ocal communities	No	Monitored sites	Warm season		Air sampler
ocai communities	110	Wiolitored sites	Sampling dates	measured value	An sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	6, 6	9/12 ~ 9/13	3.3	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	1.3	HV
Tryogo Tier.		Tryogo Frerectural Environmental Research Conter (Robe City)	9/28 ~ 9/29	1.5	11.
**			10/2 ~ 10/3		****
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	2.4	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	3.9	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	25 Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.05	HV
		(Omnosima 1971)	9/27 ~ 9/28		
			9/27 ~ 9/28		
Hirochine - Cite	26	26 Historian Cita Valuatiii Insia Hi 1 C 1 1 (17)		67	1117
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	6.7	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		1.3	MV
		(Tamaguciii City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		1.8	MV
		., ., ., ., ., ., ., ., ., ., ., ., ., .			
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/10 9/11	4.2	HV
TOKUSIIIIIA FIEL.	29	Environmental Sciences Center (Tokushima City)		4.2	п٧
			9/12 ~ 9/13		
			10/10 ~ 10/17	1 1	
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		1.4	MV
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	3.2	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	3.7	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
C D	33	S Professional Francisco and I Provide Control (S City)	9/11 - 9/16	1.1	MV
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		1.1	IVI V
		+	10/1 10/2		
77 . D 0	2.4	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	0.40	****
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	0.49	HV
		(-uo onj)	10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	· ·		0.26	MV
		(Miyazaki City)			
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	0.29	HV
	50	Health (Kagoshima City)	9/27 ~ 9/28	0.27	111
OL: D.S	27	C H I W : : WH)	8/27 ~ 8/28	0.04	1117
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	0.04	HV
			8/29 ~ 8/30		

⁽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. (Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler (Note 4) tr : detection limit value and more, less than Quantification limit value.

[20-6] Pentachloronaphthalenes/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 36/37 (Missing value: 0)
Detection Frequency (sample): 36/37 (Missing value: 0)
Detection limit: 0.01

 $Quantification \ limit: 0.03$

	stats
Geometric mean	0.10
Median	0.12
Maximum	2.5
Minimum	nd

Local communities	No	o Monitored sites	Warm season		Air sampler
Local communities	140		Sampling dates	measured value	An sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	0.03	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	tr(0.02)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.03	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	0.10	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.07	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.10	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.09	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.22	MV
	9	Chichijima Island	10/7 ~ 10/14	tr(0.02)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.15	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.32	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.12	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.25	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.01)	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.14	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.12	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.16	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	2.5	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	0.04	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	0.08	HV

IIiti	N.	Manitana Litera	Warm	season	A :1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
		0.1.71.70.6.10	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	0.26	HV
		(Osaka City)	9/13 ~ 9/14	1	== :
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)		0.13	HV
nyogo riei.	22	Hyogo Fletectural Environmental Research Center (Robe City)	9/27 ~ 9/28	0.13	ΠV
			9/28 ~ 9/29		
			10/2 ~ 10/3	ļ l	
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	0.17	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.17	HV
			9/20 ~ 9/21	1	
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	tr(0.01)	HV
Similane Frei.	23	Okt Pational Field Patin Observatory (Okthoshinia Town)	9/27 ~ 9/28	1(0.01)	11 7
TT: 1: C:	2.5	We do not be a second to the second	9/18 ~ 9/19	0.40	****
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.40	HV
			9/20 ~ 9/21		
		V	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		0.09	MV
		(Yamaguchi City)			
			8/21 ~ 8/28		
	• •		8/21 ~ 8/28	0.40	2.07
	28	Hagi Health and Welfare Center (Hagi City)		0.13	MV
		mil ii n c i inii ii n ii n ii n	9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	0.40	HV
101100111111111111111111111111111111111		Environmental Sciences Center (Tokushima City)		00	
			9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		0.18	MV
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	0.22	HV
			9/5 ~ 9/6	1	
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/10 9/11	0.42	HV
Tukuoka 1 ICI.	32	Official City Government Building (Official City)		0.42	11 V
			9/12 ~ 9/13		
			9/11 ~ 9/18	0.40	
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		0.10	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	j	
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	0.07	HV
		Science (out city)	10/3 ~ 10/4		
		Minarchi Desferatoral Institute for Dublic III-librard Fo	9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment		0.03	MV
		(Miyazaki City)			
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	0.03	HV
ragosiiiia i iti.	30	Health (Kagoshima City)		0.03	11 7
			9/27 ~ 9/28		
			8/27 ~ 8/28		****
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		
(Mate 1) Detection for		(site) is based on the number of sites, thus means (the number of detected	-: 4 /4bb		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value. (Note 5) nd : Not detected

[20-7] Hexachloronaphthalenes/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 29/37 (Missing value: 0)
Detection Frequency (sample): 29/37 (Missing value: 0)
Detection limit: 0.009

 $Quantification\ limit: 0.023$

	stats
Geometric mean	tr(0.017)
Median	tr(0.019)
Maximum	0.065
Minimum	nd

Local communities	No	Monitored sites	Warm		Air sampler
	110	Tromoted sites	Sampling dates	measured value	· · · · · · · · · · · · · · · · · · ·
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.015)	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	tr(0.015)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	0.043	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	0.035	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	0.035	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	0.040	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.036	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	0.041	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(0.013)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	0.060	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.015)	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	0.027	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.019)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	0.065	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(0.010)	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	tr(0.015)	HV

ocal communities	No	Monitored sites	Warm season		Air sampler
ocai communities	110		Sampling dates	measured value	All samples
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		_
Osaka Pref.	21	ξ, ξ	9/12 ~ 9/13	tr(0.018)	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.041	HV
Tryogo Frei.	22			0.041	111
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	tr(0.022)	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	0.033	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Simmane Fiel.	23	OKI IVALIOHAI ACIU KAHI OUSCI VALUIY (OKIIIOSIIIIIIA 10WII)		IIu	п٧
			9/27 ~ 9/28		
			9/18 ~ 9/19	0.00-	
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	0.028	HV
			9/20 ~ 9/21		
		V	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		tr(0.011)	MV
		(Yamaguchi City)		, (
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)	0/21 - 0/20	tr(0.012)	MV
	20	Hagi Health and Welfare Center (Hagi City)		11(0.012)	IVI V
	• •	Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	tr(0.022)	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		tr(0.019)	MV
-					
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	tr(0.013)	HV
Dimino 1 Terr			9/5 ~ 9/6	u(0.013)	111
	22		9/10 ~ 9/11	0.020	****
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	0.030	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		0.026	MV
		Version of Designational Leading of D. 11. II. 11. 11. 11.	10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	tr(0.022)	HV
	-	Science (Udo City)	10/3 ~ 10/4	, , , ,	
			9/11 ~ 9/18		
Miyozoki Deof	35	Miyazaki Prefectural Institute for Public Healthand Environment	7/11 - 7/10	nd	MV
Miyazaki Pref.	33	(Miyazaki City)		na	IVI V
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	nd	HV
		ream (ragosiiiia City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
OKIIIAWA I ICI.	3,	(8/29 ~ 8/30		11.1
		(site) is based on the number of sites, thus means (the number of detected			

⁽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. (Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler (Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd : Not detected

[20-8] Heptachloronaphthalenes/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 13/37 (Missing value: 0)
Detection Frequency (sample): 13/37 (Missing value: 0)
Detection limit: 0.02

 $Quantification \ limit: 0.05$

	stats
Geometric mean	nd
Median	nd
Maximum	0.12
Minimum	nd

Local communities	No	Monitored sites	Warm season		Air sampler
			Sampling dates	measured value	
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	tr(0.04)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	tr(0.02)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	tr(0.04)	MV
	9	Chichijima Island	10/7 ~ 10/14	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	0.07	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	tr(0.02)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	tr(0.02)	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	tr(0.02)	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	nd	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	nd	HV

Local communities	No	No Monitored sites	Warm season		Air sampler
Local communities	NO		Sampling dates	measured value	Ali samplei
		0.1.1	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	nd	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	0.12	HV
Tryogo Frei.	22	Tryogo i refecturar Environmentar Research Center (Robe City)	9/27 ~ 9/28	0.12	11 4
**			10/2 ~ 10/3	(0.00)	****
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	tr(0.02)	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	tr(0.02)	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
			9/27 ~ 9/28		
TT: 1: C:	2.5	W. I. G. W. I. W. I. W. I. G.	9/18 ~ 9/19		****
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	nd	HV
			9/20 ~ 9/21		
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		nd	MV
r amaguem r rer.	21	(Yamaguchi City)		nu	141 4
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		nd	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)		nd	HV
Tokusiiiiia Fiet.			9/11 ~ 9/12		п٧
		· ·	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		nd	MV
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	nd	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	tr(0.02)	HV
i ukuoka i ici.	32	Omata City Government Bunding (Omata City)		u(0.02)	111
			9/12 ~ 9/13		
C P C	22		9/11 ~ 9/18	0.05	207
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		0.05	MV
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2		
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	tr(0.02)	HV
		Science (Odo City)	10/3 ~ 10/4		
		M. I.D.C. II C. C. D.V. W. I. I.	9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment		nd	MV
,		(Miyazaki City)			
			9/25 ~ 9/26		
Kagashima Deaf	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	nd	HV
Kagoshima Pref.	30	Health (Kagoshima City)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	IIU	нv
		ÿ ;:	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	nd	HV
			8/29 ~ 8/30		
VI (1) TO () C		(site) is based on the number of sites, thus means (the number of detected		1.74	

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[21] Octachloronaphthalenes/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 37/37 (Missing value: 0)
Detection Frequency (sample): 110/110 (Missing value: 1)

Detection limit: 10

Quantification limit: 30

	stats
Geometric mean	3,600
Median	3,500
Maximum	8,500
Minimum	150

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	140	wiointoreu sites	Sampling dates	measured value	An sampler
			10/9 ~ 10/10	3,400	
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/10 ~ 10/11	3,900	LV
			10/11 ~ 10/12	5,500	
			8/27 ~ 8/28	2,800	
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/28 ~ 8/29	2,700	LV
			8/30 ~ 8/31	2,700	
			9/10 ~ 9/11	3,100	
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/11 ~ 9/12	2,800	LV
			9/12 ~ 9/13	2,800	
			9/10 ~ 9/11	3,300	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai	9/11 ~ 9/12	2,900	LV
)		City)	9/12 ~ 9/13	2,800	
			9/18 ~ 9/19	3,300	
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)			LV
i amagata Prei.	3	ramagata institute of Environmental Sciences (Murayama City)	9/19 ~ 9/20	3,300	LV
			9/20 ~ 9/21	-	
			10/16 ~ 10/17	3,500	
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/17 ~ 10/18	3,900	LV
			10/18 ~ 10/19	3,700	
			10/2 ~ 10/3	4,100	
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/3 ~ 10/4	3,900	LV
			10/4 ~ 10/5	3,300	
			9/19 ~ 9/20	3,100	
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection	9/20 ~ 9/21	3,000	LV
	-	(Koto Ward)	9/21 ~ 9/22	5,600	
ŀ			10/7 ~ 10/8	2,200	
	9	Chichijima Island	10/8 ~ 10/9	2,900	LV
		Circinginia isianu		*************	LV
			10/9 ~ 10/10	3,200	
	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11	3,400	* * * *
Kanagawa Pref.			9/11 ~ 9/12	3,200	LV
			9/12 ~ 9/13	2,800	
	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/3	4,500	
Yokohama City			10/3 ~ 10/4	3,900	LV
			10/4 ~ 10/5	3,500	
	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11	3,400	
Niigata Pref.			9/11 ~ 9/12	3,200	LV
			9/12 ~ 9/13	3,000	
			9/18 ~ 9/19	3,700	
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/19 ~ 9/20	3,300	LV
10)			9/20 ~ 9/21	4,000	2,
			9/20 ~ 9/21	3,600	
Inhiltonic De-f	1.4	Ishikawa Prefectural Institute of Public Health and Environmental			1.17
Ishikawa Pref.	14	Science (Kanazawa City)	9/11 ~ 9/12	3,500	LV
			9/12 ~ 9/13	3,500	
		Yamanashi Prefectural Institute of Public Health and Environment	9/25 ~ 9/26	5,200	
Yamanashi Pref.	15	(Kofu City)	9/26 ~ 9/27	4,400	LV
		• • • • • • • • • • • • • • • • • • • •	9/27 ~ 9/28	3,600	
	<u> </u>		9/18 ~ 9/19	3,900	
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/19 ~ 9/20	3,400	LV
			9/20 ~ 9/21	3,800	
			9/25 ~ 9/26	5,100	
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental	9/26 ~ 9/27	4,200	LV
	•	Sciences (Kakamigahara City)	9/27 ~ 9/28	3,400	
			9/5 ~ 9/6	7,000	
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)			LV
11agoya City	10	Cinkusa watu nciwa i aik (wagoya City)	9/6 ~ 9/7	8,500	LV
			9/7 ~ 9/8	3,700	
		Mie Prefecture Health and Environment Research Institute (Yokkaichi	9/25 ~ 9/26	5,100	
Mie Pref.	19	City)	9/26 ~ 9/27	4,100	LV
		**	9/27 ~ 9/28	3,400	
			10/9 ~ 10/10	4,200	
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/10 ~ 10/11	5,500	LV
	20	25 Tayoto Freteriate 3030 Belliot Filgit Belliot (3030 City)	10/11 ~ 10/12	6,900	

Local communities	No	No Monitored sites	Warm s	Air sampler	
Local Communities	140		Sampling dates	measured value	An sampler
		Onder Leight Burfachund Communit Building Building 2 Ameri	9/11 ~ 9/12	3,400	
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	9/12 ~ 9/13	3,100	LV
		(Osaka City)	9/13 ~ 9/14	3,000	
			9/26 ~ 9/27	3,800	
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	3,400	LV
			9/28 ~ 9/29	3,300	
			10/2 ~ 10/3	4,600	
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	4,300	LV
			10/4 ~ 10/5	4,100	
			9/18 ~ 9/19	7,600	
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	4,400	LV
			9/20 ~ 9/21	5,100	
			9/25 ~ 9/26	150	
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	3,500	LV
			9/27 ~ 9/28	3,300	
			9/18 ~ 9/19	7,500	
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	7,300	LV
			9/20 ~ 9/21	6,300	
		Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	8/21 ~ 8/22	2,100	
Yamaguchi Pref.	27		8/22 ~ 8/23	1,700	LV
			8/23 ~ 8/24	3,000	
		28 Hagi Health and Welfare Center (Hagi City)	8/21 ~ 8/22	2,000	
	28		8/22 ~ 8/23	1,700	LV
			8/23 ~ 8/24	2,700	
	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/10 ~ 9/11	3,400	
Tokushima Pref.			9/11 ~ 9/12	3,300	LV
		Environmental Sciences Center (Tokusinina City)	9/12 ~ 9/13	3,100	
	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/11	6,300	
Kagawa Pref.			10/11 ~ 10/12	5,700	LV
			10/12 ~ 10/13	3,700	
	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	2,900	
Ehime Pref.			9/4 ~ 9/5	6,000	LV
			9/5 ~ 9/6	5,700	
			9/10 ~ 9/11	3,300	
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	3,800	LV
			9/12 ~ 9/13	3,800	
			9/11 ~ 9/12	3,800	
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)	9/12 ~ 9/13	4,000	LV
			9/13 ~ 9/14	3,500	
		Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	5,600	
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	4,200	LV
		seience (edo eny)	10/3 ~ 10/4	4,600	
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/12	3,600	
Miyazaki Pref.	35	(Miyazaki City)	9/12 ~ 9/13	3,600	LV
		(mijuzuki City)	9/13 ~ 9/14	3,300	
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	5,000	
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	4,200	LV
		Tionin (ringosinina City)	9/27 ~ 9/28	3,500	
			8/27 ~ 8/28	2,500	
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	2,200	LV
			8/29 ~ 8/30	2,000	

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) \ast : indicates the sum value of the Quantification [Detection] limits of each congener.

[22] Pentachlorophenol and its salts and esters/air (pg/m3) $\,$

Monitored year :2018

Detection Frequency (site): 37/37 (Missing value: 0)
Detection Frequency (sample): 37/37 (Missing value: 0)
Detection limit: *0.6

Quantification limit: *1.6

	stats
Geometric mean	39
Median	47
Maximum	120
Minimum	5.5

Local communities	No	Monitored sites	Warm season		Air sampler
Local communities	110	Wiointoieu sites	Sampling dates	measured value	An samplei
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	19	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	12	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	25	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	57	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	29	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	26	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	62	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	110	MV
	9	Chichijima Island	10/7 ~ 10/14	10	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	120	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	110	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	120	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	72	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	22	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	64	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	49	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	31	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	47	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	9.9	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	63	HV

Local communities	No	Monitored sites	Warm	season	Air sampler
Locar communities	140	Wontored sites	Sampling dates	measured value	An sampler
		Ocaka Joint Profestural Covernment Building Building 2 Annay	9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	71	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	2 Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	44	HV
Hyogo Hich.	22	Tryogo Fretecturai Environmentai Researen Center (Robe City)		77	11 4
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	56	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	53	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	5.5	HV
Similane i iei.	23	Oki ivational Acid Kain Observatory (Okinosinnia Town)		3.3	11 V
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	66	HV
			9/20 ~ 9/21		
		W. TID C. IV. C. CDIP W. II. ID.	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		110	MV
		(Yamaguchi City)			112 1
			8/21 ~ 8/28		
	20	Hagi Health and Welfare Center (Hagi City)	0/21 - 0/20	120	MV
	28	riagi ricann and wenait center (riagi erty)		120	IVI V
			0.110		
	•	Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	57	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		39	MV
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	110	HV
			9/5 ~ 9/6	110	
F	22	0 . (0 . (0 . (0 . (0 . (0 . (0 . (0 .	9/10 ~ 9/11		****
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	44	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		32	MV
		W D. C IV do . CD IV IV IV . IF	10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	21	HV
		Science (Udo City)	10/3 ~ 10/4		·= ·
			9/11 ~ 9/18		
Miyozolci Deof	35	Miyazaki Prefectural Institute for Public Healthand Environment	J/11 - J/18	11	MV
Miyazaki Pref.	33	(Miyazaki City)		11	IVI V
		· · · · · · · · · · · · · · · · · · ·			
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	21	HV
		Heatui (Kagosiiilia City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	11	HV
1101.	5,	(14milgaini 1 milgo)	8/29 ~ 8/30		-111
		(site) is based on the number of sites, thus means (the number of detected			

⁽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. (Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[22-1] Pentachlorophenol/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 37/37 (Missing value: 0)
Detection Frequency (sample): 37/37 (Missing value: 0)
Detection limit: 0.2

Quantification limit : 0.2

	stats
Geometric mean	5.1
Median	5.8
Maximum	30
Minimum	0.9

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	NO	Wountored sites	Sampling dates	measured value	All sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	2.2	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	1.5	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	3.0	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	5.4	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	3.9	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	3.0	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	4.6	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	12	MV
	9	Chichijima Island	10/7 ~ 10/14	0.9	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	13	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	11	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	6.2	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	14	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	2.6	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	12	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	8.0	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	4.9	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	7.0	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	1.4	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	6.8	HV

ocal communities	No	Monitored sites	Warm season		Air sampler
ocai communities	110	Wiolikored sites	Sampling dates	measured value	An sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	5,	9/12 ~ 9/13	22	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	22 Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	6.1	HV
Tryogo Tier.			9/28 ~ 9/29	0.1	11.
**		7	10/2 ~ 10/3		****
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	8.0	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	7.1	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	0.9	HV
Similane 1 ici.	23	OKI I MIONIM I ICIG KAIN OUSCI VALOI y (OKINOSIIINIA TOWII)		0.7	11 4
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	8.4	HV
			9/20 ~ 9/21		
		V 1'D C (11 d) (CD 11' II II II II'	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		27	MV
		(Yamaguchi City)		·	
ŀ			8/21 ~ 8/28		
	20	Hand Hands and Walfana Cantan (Hand City)	0/21 - 0/20	30	MV
	28	Hagi Health and Welfare Center (Hagi City)		30	IVI V
		Tokushima Prefectural Public Health, Pharmaceutical and	9/10 ~ 9/11		
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	7.0	HV
		Environmental Sciences Center (Tokushinia City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		3.9	MV
		, , , , , , , , , , , , , , , , , , ,			
			9/3 ~ 9/4		
Ehime Pref.	21	31 Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	15	HV
Ellille Fiel.	31			13	HV
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	5.8	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		4.5	MV
~		g(g)			
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental		4.6	HV
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	4.0	нv
		· ·	10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		
Miyazaki Pref.	35	•		1.1	MV
		(Miyazaki City)			
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	1.9	HV
1500mmu 1 101.	50	Health (Kagoshima City)	9/27 ~ 9/28	1.7	111
			8/27 ~ 8/28		****
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	1.2	HV
		II I	8/29 ~ 8/30		

⁽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.
(Note 3) HV: High Volume Air Sampler, MV: Medium Volume Air Sampler
(Note 4) *: indicates the sum value of the Quantification [Detection] limits of each congener.

[22-2] Pentachloroanisole/air (pg/m3)

Monitored year :2018

Detection Frequency (site): 37/37 (Missing value: 0)
Detection Frequency (sample): 37/37 (Missing value: 0)
Detection limit: 0.4

Quantification limit: 1.1

	stats
Geometric mean	34
Median	40
Maximum	110
Minimum	4.6

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	NO	Monitored sites	Sampling dates	measured value	All sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	17	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	11	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	22	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	52	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	25	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	23	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	57	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	98	MV
	9	Chichijima Island	10/7 ~ 10/14	9.5	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	110	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	98	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	110	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	58	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	19	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	52	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	41	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	26	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	40	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	8.5	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	56	HV

Local communities	No	No Monitored sites	Warm season		Air sampler
Local communities	NO		Sampling dates	measured value	An sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	49	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	38	HV
nyogo riei.	22	Hyogo Frerecturar Environmentar Research Center (Robe City)		36	пу
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	48	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	46	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	4.6	HV
		, , , , , , , , , , , , , , , , , , , ,	9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	58	HV
imosiiiila City	20	Throsinna City Kokutaiji Junioi Trigii School (Fillosinnia City)		30	пv
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		87	MV
		(
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		94	MV
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	50	HV
			9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 - 10/17	35	MV
Kagawa Fiei.				33	IVI V
			0.00		
		Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	92	HV
Ehime Pref.	31		9/4 ~ 9/5		
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	38	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		28	MV
Ü					
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	16	HV
ramamoto i ici.	34	Science (Udo City)		10	11 4
			10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		,
Miyazaki Pref.	35	(Miyazaki City)		10	MV
		* *			
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	19	HV
		Heatti (Kagosiiilia City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	9.4	HV
			8/29 ~ 8/30	***	
	l	1	0/29 - 0/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

[23] Short-chain chlorinated paraffins/air (pg/m3)

Monitored year :2018

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

Detection limit : *210

Quantification limit : *550

	stats
Geometric mean	1,200
Median	1,100
Maximum	4,800
Minimum	tr(340)

Local communities	No	Monitored sites	Warm	season	A in complex
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	590	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	tr(360)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	560	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	980	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	550	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(450)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	tr(520)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	3,200	MV
	9	Chichijima Island	10/7 ~ 10/14	1,200	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	2,000	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	4,000	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	1,100	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	670	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	690	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	2,200	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	1,000	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	1,700	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	4,800	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	900	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	1,100	HV

Local communities	No	No Monitored sites	Warm season		Air sampler
Local communities	110	Montored sites	Sampling dates	measured value	7 in sumplet
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	(Osaka City)	9/12 ~ 9/13	2,900	HV
		(Osaka City)	9/13 ~ 9/14		
		Hyogo Prefectural Environmental Research Center (Kobe City)	9/26 ~ 9/27		
Hyogo Pref.	22		9/27 ~ 9/28	1,200	HV
			9/28 ~ 9/29	·	
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	2,200	HV
		3,	10/4 ~ 10/5	,	
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	1,500	HV
runu r rer.	2-1	remittin Quanty Monitoring Station (Term City)	9/20 ~ 9/21	1,500	111
Shimane Pref.	25	Old National Acid Bain Observatory (Older abine Tarrey)	9/25 ~ 9/26	t=(400)	HV
Shimane Prei.	23	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	tr(490)	пv
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	2,600	HV
			9/20 ~ 9/21		
		V	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		1,500	MV
		(Yamaguchi City)			
			8/21 ~ 8/28	1,800	MV
	28	Hagi Health and Welfare Center (Hagi City)			
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	2,000	HV
r okusiiiii a rer.			9/12 ~ 9/13	2,000	
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/10 ~ 10/17	730	MV
Kagawa Fiei.					IVI V
			0/2 0/4		
FII: D. C	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4	3,100	HV
Ehime Pref.			9/4 ~ 9/5		
			9/5 ~ 9/6		
			9/10 ~ 9/11	1,400	HV
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12		
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		1,000	MV
		W O C C II C C C C C C C C C C C C C C C	10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	760	HV
		Science (Udo City)	10/3 ~ 10/4		
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	2,11 2,110	1,400	MV
-,		(Miyazaki City)		-,	*** *
			9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	tr(520)	HV
Kagosiiiiia Fiel.	30	Health (Kagoshima City)		tr(520)	п٧
			9/27 ~ 9/28		
			8/27 ~ 8/28	(2.10)	
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	tr(340)	HV
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

[23-1] Chlorinated decanes/air (pg/m3)

Monitored year :2018

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

Detection limit : 60 Quantification limit : 150

	stats
Geometric mean	370
Median	390
Maximum	1,700
Minimum	tr(130)

T 1 1/1	N	W 2 12	Warm	season	A: 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	240	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	tr(130)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	290	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	400	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	250	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	160	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	200	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	940	MV
	9	Chichijima Island	10/7 ~ 10/14	330	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	530	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	1,700	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	260	н٧
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	280	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	300	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	1,100	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	400	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	390	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	900	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	200	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	470	HV

Local communities	No	Monitored sites	Warm	season	Air sampler
zoea. communities	110	Montored sites	Sampling dates	measured value	7 in sumplet
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	(Osaka City)	9/12 ~ 9/13	950	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	510	HV
, ,			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	730	HV
		(,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	560	HV
Nara 1 ICI.	24	Tenii Aii Quanty Montoring Station (Tenii City)		300	11 V
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	tr(140)	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	1,000	HV
			9/20 ~ 9/21		
		W. LID C. H. S. CDIN W. H. IV.	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		560	MV
_		(Yamaguchi City)			
			8/21 ~ 8/28	600	MV
	28	Hagi Health and Welfare Center (Hagi City)			
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	540	HV
Tokusiiiiia Tiet.	29	Environmental Sciences Center (Tokushima City)		340	
			9/12 ~ 9/13		
W D 6	20	W. D. C. J. D. L. C. L. D. L. C. L.	10/10 ~ 10/17	210	MOV
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		210	MV
			9/3 ~ 9/4		HV
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	500	
			9/5 ~ 9/6		
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	420	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		300	MV
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	240	HV
		Science (Udo City)	10/3 ~ 10/4	2.70	
			9/11 ~ 9/18		
Miyazaki Pref.	35	Miyazaki Prefectural Institute for Public Healthand Environment	7/11 7/10	150	MV
IVII Y AZAKI I ICI.	33	(Miyazaki City)		150	1V1 V
			0/25 - 0/26		
W 1: D c	26	Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26	170	1137
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	170	HV
			9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	tr(130)	HV
		1	8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

[23-2] Chlorinated undecanes/air (pg/m3)

Monitored year :2018

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

Detection limit : 40 Quantification limit : 110

	stats
Geometric mean	450
Median	430
Maximum	2,600
Minimum	tr(100)

Local communities	N-	Maritana daisa	Warm	season	A:1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	230	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	130	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	150	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	340	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	180	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	190	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	180	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	1,400	MV
	9	Chichijima Island	10/7 ~ 10/14	660	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	960	н٧
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	1,600	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	430	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	230	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	260	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	740	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	360	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	930	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	2,600	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	410	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	350	HV

T 1 22	N	W 2 12	Warm	season	4: 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	1,200	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	460	HV
,		7,0	9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	790	HV
		,	10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	500	HV
rtara r rer.	2-1	remittin Quanty Monitoring Station (Tentre city)	9/20 ~ 9/21	500	111
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	160	HV
Sillilane Fiel.	23	Okt National Acid Rain Observatory (Okinosinina Town)	9/26 ~ 9/27	100	пу
			9/27 ~ 9/28		
TT 11 CT	2.5	The state of the s	9/18 ~ 9/19	1.000	****
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	1,000	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	(Yamaguchi City)		490	MV
		(Tuninguein City)			
			8/21 ~ 8/28	740	
	28	Hagi Health and Welfare Center (Hagi City)			MV
			9/10 ~ 9/11		
Tokushima Pref.	29	okushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	680	HV
		Environmental Sciences Center (Tokushima City)	9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		360	MV
C					
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	1.800	HV
		Eminie i ferectural Government Ivanyo Regional Office (Gwajima City)	9/5 ~ 9/6	1,000	
			9/10 ~ 9/11		
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	490	HV
i ukuoka i ici.	32	Omata City Government Bunding (Omata City)	9/12 ~ 9/13	420	111
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)	9/11 ~ 9/18	340	MV
Saga Fiel.	33	Saga Frerectural Environmental Research Center (Saga City)		340	IVI V
			10/1 10/2		
W . B .	2.4	Kumamoto Prefectural Institute of Public Health and Environmental	10/1 ~ 10/2	200	177.7
Kumamoto Pref.	34	Science (Udo City)	10/2 ~ 10/3	HV	
			10/3 ~ 10/4		
		Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18		_
Miyazaki Pref.	35	(Miyazaki City)		820	MV
		, y			
		Kagoshima Prefectural Institute for Environmental Research and Public	9/25 ~ 9/26		
Kagoshima Pref.	36	Health (Kagoshima City)	9/26 ~ 9/27	180	HV
		Ticarui (Ragosiilila City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)	8/28 ~ 8/29	tr(100)	HV
			8/29 ~ 8/30		
		I.			

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

[23-3] Chlorinated dodecanes/air (pg/m3)

Monitored year :2018

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

Detection limit : 40 Quantification limit : 110

	stats
Geometric mean	190
Median	190
Maximum	880
Minimum	tr(60)

Local communities	M-	Maritana daisa	Warm	season	A :1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	tr(80)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	tr(60)	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(70)	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	160	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	tr(80)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	tr(60)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	tr(80)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	590	MV
	9	Chichijima Island	10/7 ~ 10/14	150	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	360	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	460	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	270	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	tr(100)	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(80)	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	240	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	160	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	250	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	880	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	200	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	190	HV

Local communities	No	Monitored sites		season	Air sampler
_	110	Montored sites	Sampling dates	measured value	7 in sampler
		Osaka Joint Prefectural Government Building, Building 2 Annex	9/11 ~ 9/12		
Osaka Pref.	21	(Osaka City)	9/12 ~ 9/13	520	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	190	HV
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	430	
Ĭ			10/4 ~ 10/5		
		+	9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	260	HV
Nara 1 ICI.	24	Tein An Quanty Wontoring Station (Tein City)		200	11 V
		-	9/20 ~ 9/21		
			9/25 ~ 9/26	100	****
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	130	HV
			9/27 ~ 9/28		
			9/18 ~ 9/19		
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	400	HV
			9/20 ~ 9/21		
			8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment		240	MV
_		(Yamaguchi City)			
•			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)		270	MV
	20	ring: ricular and world come: (ring: city)		210	*** *
			9/10 ~ 9/11		
Tokushima Pref.	29	Tokushima Prefectural Public Health, Pharmaceutical and	9/11 ~ 9/12	510	HV
Tokusiiiiia Fiet.	27	Environmental Sciences Center (Tokushima City)		310	
			9/12 ~ 9/13		
			10/10 ~ 10/17		
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		110	MV
Ehime Pref.			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/3 ~ 9/4 9/4 ~ 9/5	520	HV
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)		520	HV
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	520	HV
Ehime Pref. Fukuoka Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City) Omuta City Government Building (Omuta City)	9/4 ~ 9/5 9/5 ~ 9/6	520	
			9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12		
			$9/4 \sim 9/5$ $9/5 \sim 9/6$ $9/10 \sim 9/11$ $9/11 \sim 9/12$ $9/12 \sim 9/13$		
Fukuoka Pref.		Omuta City Government Building (Omuta City)	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12		HV
	32		$9/4 \sim 9/5$ $9/5 \sim 9/6$ $9/10 \sim 9/11$ $9/11 \sim 9/12$ $9/12 \sim 9/13$	280	HV
Fukuoka Pref.	32	Omuta City Government Building (Omuta City) Saga Prefectural Environmental Research Center (Saga City)	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13 9/11 ~ 9/18	280	HV
Fukuoka Pref. Saga Pref.	32	Omuta City Government Building (Omuta City) Saga Prefectural Environmental Research Center (Saga City) Kumamoto Prefectural Institute of Public Health and Environmental	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13 9/11 ~ 9/18 10/1 ~ 10/2	280	HV
Fukuoka Pref.	32	Omuta City Government Building (Omuta City) Saga Prefectural Environmental Research Center (Saga City)	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13 9/11 ~ 9/18 10/1 ~ 10/2 10/2 ~ 10/3	280	HV
Fukuoka Pref. Saga Pref.	32	Omuta City Government Building (Omuta City) Saga Prefectural Environmental Research Center (Saga City) Kumamoto Prefectural Institute of Public Health and Environmental	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13 9/11 ~ 9/18 10/1 ~ 10/2 10/2 ~ 10/3 10/3 ~ 10/4	280	HV
Fukuoka Pref. Saga Pref. Kumamoto Pref.	32 33 34	Omuta City Government Building (Omuta City) Saga Prefectural Environmental Research Center (Saga City) Kumamoto Prefectural Institute of Public Health and Environmental	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13 9/11 ~ 9/18 10/1 ~ 10/2 10/2 ~ 10/3	280 270 170	HV MV HV
Fukuoka Pref. Saga Pref.	32	Omuta City Government Building (Omuta City) Saga Prefectural Environmental Research Center (Saga City) Kumamoto Prefectural Institute of Public Health and Environmental Science (Udo City)	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13 9/11 ~ 9/18 10/1 ~ 10/2 10/2 ~ 10/3 10/3 ~ 10/4	280	HV
Fukuoka Pref. Saga Pref. Kumamoto Pref.	32 33 34	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	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13 9/11 ~ 9/18 10/1 ~ 10/2 10/2 ~ 10/3 10/3 ~ 10/4 9/11 ~ 9/18	280 270 170	HV MV HV
Fukuoka Pref. Saga Pref. Kumamoto Pref. Miyazaki Pref.	32 33 34 35	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)	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13 9/11 ~ 9/18 10/1 ~ 10/2 10/2 ~ 10/3 10/3 ~ 10/4 9/11 ~ 9/18	280 270 170 190	HV MV HV
Fukuoka Pref. Saga Pref. Kumamoto Pref.	32 33 34	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) Kagoshima Prefectural Institute for Environmental Research and Public	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13 9/11 ~ 9/18 10/1 ~ 10/2 10/2 ~ 10/3 10/3 ~ 10/4 9/11 ~ 9/18 9/25 ~ 9/26 9/26 ~ 9/27	280 270 170	HV MV HV
Fukuoka Pref. Saga Pref. Kumamoto Pref. Miyazaki Pref.	32 33 34 35	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)	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13 9/11 ~ 9/18 10/1 ~ 10/2 10/2 ~ 10/3 10/3 ~ 10/4 9/11 ~ 9/18	280 270 170 190	HV MV HV
Fukuoka Pref. Saga Pref. Kumamoto Pref. Miyazaki Pref.	32 33 34 35	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) Kagoshima Prefectural Institute for Environmental Research and Public	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13 9/11 ~ 9/18 10/1 ~ 10/2 10/2 ~ 10/3 10/3 ~ 10/4 9/11 ~ 9/18 9/25 ~ 9/26 9/26 ~ 9/27	280 270 170 190	HV MV HV
Fukuoka Pref. Saga Pref. Kumamoto Pref. Miyazaki Pref.	32 33 34 35	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) Kagoshima Prefectural Institute for Environmental Research and Public	9/4 ~ 9/5 9/5 ~ 9/6 9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13 9/11 ~ 9/18 10/1 ~ 10/2 10/2 ~ 10/3 10/3 ~ 10/4 9/11 ~ 9/18 9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	280 270 170 190	HV MV HV

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

[23-4] Chlorinated tridecanes/air (pg/m3)

Monitored year :2018

 $\label{eq:continuous} Detection\ Frequency\ (site): 26/37\ (Missing\ value: 0)$ $Detection\ Frequency\ (sample): 26/37\ (Missing\ value: 0)$

Detection limit: 70 Quantification limit: 180

	stats
Geometric mean	tr(100)
Median	tr(110)
Maximum	470
Minimum	nd

T 1 22	NY	W 5 15	Warm	season	A. 1
Local communities	No	Monitored sites	Sampling dates	measured value	Air sampler
Hokkaido	1	Oshima General Subprefectural Bureau (Hakodate City)	10/5 ~ 10/12	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	8/27 ~ 8/28 8/28 ~ 8/29 8/29 ~ 8/30	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	9/7 ~ 9/14	tr(80)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/18 ~ 9/25	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/12 ~ 10/19	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	9/28 ~ 10/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	9/19 ~ 9/26	310	MV
	9	Chichijima Island	10/7 ~ 10/14	tr(80)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(160)	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/2 ~ 10/9	190	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	tr(140)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	9/18 ~ 9/19 9/19 ~ 9/20 9/20 ~ 9/21	nd	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	9/10 ~ 9/11 9/11 ~ 9/12 9/12 ~ 9/13	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(130)	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	9/18 ~ 9/25	tr(80)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(110)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/5 ~ 9/12	470	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/25 ~ 9/26 9/26 ~ 9/27 9/27 ~ 9/28	tr(90)	HV
Kyoto Pref.	20	Kyoto Prefecture Joyo Senior High School (Joyo City)	10/9 ~ 10/10 10/10 ~ 10/11 10/11 ~ 10/12	tr(120)	HV

Local communities	No	Monitored sites	Warm	season	Air sampler
Local communities	140	Wolntored sites	Sampling dates	measured value	All sampler
			9/11 ~ 9/12		
Osaka Pref.	21	Osaka Joint Prefectural Government Building, Building 2 Annex	9/12 ~ 9/13	270	HV
		(Osaka City)	9/13 ~ 9/14		
			9/26 ~ 9/27		
Hyogo Pref.	22	Hyogo Prefectural Environmental Research Center (Kobe City)	9/27 ~ 9/28	tr(90)	HV
Hyogo Hen.	22	Tryogo Perceturai Environnicinai Research ecinei (Robe City)		11(50)	111
			9/28 ~ 9/29		
			10/2 ~ 10/3		
Kobe City	23	Kobe City Government Building (Kobe City)	10/3 ~ 10/4	280	HV
			10/4 ~ 10/5		
			9/18 ~ 9/19		
Nara Pref.	24	Tenri Air Quality Monitoring Station (Tenri City)	9/19 ~ 9/20	tr(140)	HV
			9/20 ~ 9/21		
			9/25 ~ 9/26		
Shimane Pref.	25	Oki National Acid Rain Observatory (Okinoshima Town)	9/26 ~ 9/27	nd	HV
Difficulties Tress	20	om rumonar richa rum Goser valory (Gumosimia Town)	9/27 ~ 9/28		
Himselin Cir	25	Historian City Valuation Lorian Historian Law (1)	9/18 ~ 9/19	210	717.7
Hiroshima City	26	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/19 ~ 9/20	210	HV
			9/20 ~ 9/21		
		Yamaguchi Prefectural Institute of Public Health and Environment	8/21 ~ 8/28		
Yamaguchi Pref.	27	Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)		200	MV
		(Tamaguciii City)			
			8/21 ~ 8/28		
	28	Hagi Health and Welfare Center (Hagi City)	V VV	tr(170)	MV
	20				111 1
			9/10 ~ 9/11		
	•	Tokushima Prefectural Public Health, Pharmaceutical and	************************	***	HV
Tokushima Pref.	29	Environmental Sciences Center (Tokushima City)	9/11 ~ 9/12	280	
		· · · · · · · · · · · · · · · · · · ·	9/12 ~ 9/13		
			10/10 ~ 10/17		MV
Kagawa Pref.	30	Kagawa Prefectural Public Swimming Pool (Takamatsu City)		nd	
			9/3 ~ 9/4		
Ehime Pref.	31	Ehime Prefectural Government Nanyo Regional Office (Uwajima City)	9/4 ~ 9/5	260	HV
	31	Estime Fretectural Government Ivanyo Regional Office (Gwajima City)	9/5 ~ 9/6	- 200	11 V
			9/10 ~ 9/11		
F. 1. B. 6	22		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	200	****
Fukuoka Pref.	32	Omuta City Government Building (Omuta City)	9/11 ~ 9/12	200	HV
			9/12 ~ 9/13		
			9/11 ~ 9/18		
Saga Pref.	33	Saga Prefectural Environmental Research Center (Saga City)		tr(130)	MV
			10/1 ~ 10/2		
Kumamoto Pref.	34	Kumamoto Prefectural Institute of Public Health and Environmental	10/2 ~ 10/3	tr(70)	HV
		Science (Udo City)	10/2 10/3	=(. 0)	
			9/11 ~ 9/18		
M. 118 c	2.5	Miyazaki Prefectural Institute for Public Healthand Environment	9/11 ~ 9/18	100	3.577
Miyazaki Pref.	35	(Miyazaki City)		190	MV
		• •			
		Vogoshima Profestural Institute for Essissant at Daniel	9/25 ~ 9/26		
Kagoshima Pref.	36	Kagoshima Prefectural Institute for Environmental Research and Public	9/26 ~ 9/27	tr(70)	HV
		Health (Kagoshima City)	9/27 ~ 9/28		
			8/27 ~ 8/28		
Okinawa Pref.	37	Cape Hedo (Kunigami Village)		nd	HV
OKIIIAWA FIEL.	31	Cape ricuo (Kuniganii vinage)	8/28 ~ 8/29	IIU	пу
			8/29 ~ 8/30		

⁽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.

⁽Note 3) HV: High Volume Air Sampler , MV: Medium Volume Air Sampler

⁽Note 4) tr : detection limit value and more, less than Quantification limit value.

⁽Note 5) nd: Not detected