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

Monitored year: 2019

Detection Frequency (site) : 61/61 (Missing value : 0) Detection Frequency (sample) : 48/48 (Missing value : 0)

Detection limit: *3.3 Quantification limit: *12

	Aggregated value
Geometric mean	120
Median	90
Maximum	3,400
Minimum	tr(6.6)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	37
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(10)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	560
Akita Pref.	4	Lake Hachiro	45
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	22
Fukushima Pref.	6	Onahama Port	490
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	80
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	88
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	150
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	330
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	220
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	1,600
,		Mouth of Riv. Sumida (Minato Ward)	2,600
Yokohama City	14	Yokohama Port	360
Kawasaki City	15	Keihin Canal, Port of Kawasaki	880
Niigata Pref.		Lower Riv. Shinano (Niigata City)	91
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	57
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1,200
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	3,400
Nagano Pref.	20	Lake Suwa (center)	52
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	22
Aichi Pref.		Nagoya Port	490
Mie Pref.	23	Yokkaichi Port	130
Shiga Pref.	-	Lake Biwa (center, offshore of Karasaki)	68
Kyoto Pref.		Miyazu Port	16
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	1,800
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	480
Osaka City	28	Osaka Port	1,800
Hyogo Pref.	29	Offshore of Himeji	35
Kobe City		Kobe Port (center)	510
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	150
Okayama Pref.	32	Offshore of Mizushima	52
Hiroshima Pref.		Kure Port	150
** 115.4		Hiroshima Bay	43
Yamaguchi Pref.	35	Tokuyama Bay	28
	36	Offshore of Ube	28
	37	Offshore of Hagi	30
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	46
Kagawa Pref.	39	Takamatsu Port	480
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	12
Kitakyushu City	41	Dokai Bay	790
Saga Pref.	42	Imari Bay	15
Nagasaki Pref.	43	Omura Bay	tr(7.8)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	140
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	tr(6.6)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	12
<u> </u>	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	21
Okinawa Pref.	48	Naha Port	360

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

Detection frequency (sample) is based on the number of samples, 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 congeners.

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

Monitored year: 2019

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

Detection limit: 0.1 Quantification limit: 0.3

	Aggregated value
Geometric mean	0.9
Median	0.6
Maximum	62
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	0.6
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(0.1)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	1.7
Akita Pref.	4	Lake Hachiro	0.4
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(0.2)
Fukushima Pref.	6	Onahama Port	2.2
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1.8
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	0.5
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	1.2
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	5.5
Chiba City		Mouth of Riv. Hanami (Chiba City)	2.7
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	1.9
	13	Mouth of Riv. Sumida (Minato Ward)	1.9
Yokohama City	14	Yokohama Port	0.7
Kawasaki City	15	Keihin Canal, Port of Kawasaki	4.6
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	0.3
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	14
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	0.6
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	62
Nagano Pref.		Lake Suwa (center)	tr(0.2)
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	0.3
Aichi Pref.		Nagoya Port	2.9
Mie Pref.		Yokkaichi Port	0.4
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	0.7
Kyoto Pref.		Miyazu Port	0.5
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	3.9
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	1.4
Osaka City		Osaka Port	1.4
Hyogo Pref.	29	Offshore of Himeji	1.3
Kobe City	30	Kobe Port (center)	0.6
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	0.3
Okayama Pref.	32	Offshore of Mizushima	0.7
Hiroshima Pref.	33	Kure Port	0.6
	34	Hiroshima Bay	0.5
Yamaguchi Pref.	35	Tokuyama Bay	5.6
	36	Offshore of Ube	1.6
	37	Offshore of Hagi	0.6
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	0.3
Kagawa Pref.	39	Takamatsu Port	0.7
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	tr(0.2)
Kitakyushu City		Dokai Bay	1.9
Saga Pref.	42	Imari Bay	0.3
Nagasaki Pref.	43	Omura Bay	0.5
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	1.4
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	0.3
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	0.5
Okinawa Pref.	48	Naha Port	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) tr : Detection limit value and more, less than Quantification limit value.

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

Monitored year: 2019

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

Detection limit: 1 Quantification limit: 2

	Aggregated value
Geometric mean	18
Median	12
Maximum	730
Minimum	3

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	11
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	4
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	250
Akita Pref.	4	Lake Hachiro	5
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	3
Fukushima Pref.	6	Onahama Port	53
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	22
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	12
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	15
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	45
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	43
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	75
•	13	Mouth of Riv. Sumida (Minato Ward)	70
Yokohama City	14	Yokohama Port	13
Kawasaki City	15	Keihin Canal, Port of Kawasaki	28
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	8
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	10
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	120
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	730
Nagano Pref.	20	Lake Suwa (center)	7
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	6
Aichi Pref.	22	Nagoya Port	49
Mie Pref.	23	Yokkaichi Port	16
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	7
Kyoto Pref.		Miyazu Port	8
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	160
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	91
Osaka City	28	Osaka Port	120
Hyogo Pref.	29	Offshore of Himeji	9
Kobe City	30	Kobe Port (center)	40
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	63
Okayama Pref.	32	Offshore of Mizushima	9
Hiroshima Pref.	33	Kure Port	7
	34	Hiroshima Bay	7
Yamaguchi Pref.	35	Tokuyama Bay	12
	36	Offshore of Ube	12
	37	Offshore of Hagi	12
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	6
Kagawa Pref.	39	Takamatsu Port	18
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	5
Kitakyushu City	41	Dokai Bay	21
Saga Pref.	42	Imari Bay	6
Nagasaki Pref.	43	Omura Bay	3
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	27
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	3
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	6
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	9
Okinawa Pref.	48	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.

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

Monitored year: 2019

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

Detection limit : 2 Quantification limit : 5

	Aggregated value
Geometric mean	15
Median	12
Maximum	1,100
Minimum	nd

Hokkaido	Local communities	No.	Monitored sites	Measured value
Invate Pref. 2 Toyosawa Bridge, Riv. Toyosawa (Hanamaki City) 194 Akita Pref. 3 Sendai Bay (Matsushima Bay) 122 Akita Pref. 4 Lake Hachiro 104 Yamagata Pref. 6 Mouth of Riv. Mogami (Sakata City) 104 Iburaki Pref. 7 Tonekamome-chasi Bridge, Mouth of Riv. Tone (Kamisu City) 12 Tochigi Pref. 8 Tagawa Kyubun Area Head Works (Utsunomiya City) 17 Tochigi Pref. 8 Tagawa Kyubun Area Head Works (Utsunomiya City) 17 Tokigi Pref. 9 Tone-ozeki Weir, Riv. Tone (Chiyoda Town) 20 Saitama Pref. 10 Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) 33 Chiba City 11 Mouth of Riv. Hanami (Chiba City) 75 Tokyo Met. 12 Mouth of Riv. Arakawa (Koto Ward) 690 Yokohama City 14 Yokohama Port 14 Yokohama Port 14 Yokohama Port 15 Kawasaki City 15 Keihin Canal, Port of Kawasaki 170 Toyama Pref. 16 Lower Riv. Shinano (Niigata City) 6 Toyama Pref. 17 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 170 Nagano Pref. 19 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 1,100 Aichi Pref. 21 Kasetsuka-bashi Bridge, Riv. Tenryu (Iwata City) 1,80 Aichi Pref. 21 Xokascih Port 1,80 Aichi Pref. 22 Yokakachi Port 1,80 Aichi Pref. 23 Yokakachi Port 1,80 Aichi Pref. 24 Lake Biwa (center) 5 Kyoto City 26 Miyamae-bashi Bridge, Riv. Kasura (Kyoto City) 510 Osaka Pref. 27 Mouth of Riv. Yamato (Sakai City) 72 Osaka City 29 Oifshore of Himeji 170 170 Yamaguchi Pref. 31 Kinokawa-ohashi Bridge, Riv. Kinokawa (Wakayama City) 1,100 Yamaguchi Pref. 31 Kinokawa-ohashi Bridge, Riv. Kinokawa (Wakayama City) 1,100 Aichi Pref. 32 Oifshore of Mizashima 7 Tokushima Pref. 31 Kinokawa-ohashi Bridge, Riv. Kinokawa (Wakayama City) 1,100 Aichi Pref. 32 Oifshore of Himeji 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170 170	Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(2)
Miyagi Pref. 3 Sendai Bay (Masushima Bay) 120 Akita Pref. 4 Lake Hachiro nd Namagara Pref. 5 Mouth of Riv. Mogami (Sakata City) nd 150 Pukushima Pref. 6 Onahama Port 150 Onahama Port 150 Daraki Pref. 7 Tonekamone-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) 12 Tochigi Pref. 8 Tagawa Kyubun Area Head Works (Utsunomiya City) 17 Gumna Pref. 9 Tone-ozeki Weir, Riv. Tone (Chiyoda Town) 20 Saitama Pref. 10 Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) 38 Saitama Pref. 10 Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City) 75 Tokyo Met. 12 Mouth of Riv. Hanami (Chiba City) 75 Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 990 Yokohama City 14 Yokohama Port 71 Kawasaki City 15 Keihin Canal, Port of Kawasaki 170 Niigata Pref. 16 Lower Riv. Shinano (Niigata City) 6 Toyama Pref. 17 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 17 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 11,00 Nagano Pref. 20 Masamo Pref. 21 Kaketsuka-bashi Bridge, Riv. Shono (Tsuruga City) 1,100 Aichi Pref. 22 Nagoya Port 180 Mishima-bashi Bridge, Riv. Tenryu (Iwata City) 180 Miyamac-bashi Bridge, Riv. Tenryu (Iwata City) 180 Miyamac-bashi Bridge, Riv. Katsura (Kyoto City) 510 Osaka Pref. 22 Miyamac-bashi Bridge, Riv. Katsura (Kyoto City) 510 Osaka Pref. 29 Offshore of Himeji 17 17 18 17 18 17 18 18	Iwate Pref.	2		nd
Akita Pref. 4	Miyagi Pref.	3		120
Yamagata Pref. 5 Mouth of Riv. Mogami (Sakata City) 150	Akita Pref.	4		nd
Fukushima Pref. 6 Onahama Port 150	Yamagata Pref.	5		nd
Tochigi Pref. 8		6		150
Tochigi Pref. 8	Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	12
Gunma Pref. 9 Tone-ozeki Weir, Riv. Tone (Chiyoda Town) 20	Tochigi Pref.	8	· · · · · · · · · · · · · · · · · · ·	17
Saitama Pref. 10		9		20
Chiba City 11 Mouth of Riv. Hanami (Chiba City) 75 Tokyo Met. 12 Mouth of Riv. Arakawa (Koto Ward) 6990 Yokohama City 14 Yokohama Port 71 Kawasaki City 15 Keihin Canal, Port of Kawasaki 170 Niigata Pref. 16 Lower Riv. Shinano (Niigata City) 6 Toyama Pref. 17 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) tt(2) Ishikawa Pref. 18 Mouth of Riv. Sai (Kanazawa City) 330 Fukui Pref. 19 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 1,100 Nagano Pref. 21 Kaketsuka-bashi Bridge, Riv. Shono (Tsuruga City) nd Aichi Pref. 21 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) nd Aichi Pref. 21 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) nd Aichi Pref. 22 Nagoya Port 180 Mie Pref. 23 Yaksaichi Port 32 Shiga Pref. 24 Lake Biwa (center) 15 Kyoto Pref. 25 Miyazab	Saitama Pref.	10		38
13 Mouth of Riv. Sumida (Minato Ward) 990 Yokohama City 14 Yokohama Port 771 Kawasaki City 15 Keihin Canal, Port of Kawasaki 170 Niigata Pref. 16 Lower Riv. Shinano (Niigata City) 66 Toyama Pref. 17 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 172 Ishikawa Pref. 18 Mouth of Riv. Sai (Kanazawa City) 1,100 Nagano Pref. 19 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 1,100 Nagano Pref. 20 Lake Suwa (center) 5 Shizuoka Pref. 21 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) nd Aichi Pref. 22 Nagoya Port 180 Mie Pref. 23 Yokkaichi Port 32 Shiga Pref. 24 Lake Biwa (center, offshore of Karasaki) 5 5 Kyoto Pref. 25 Miyazu Port 180 Osaka Pref. 27 Mouth of Riv. Yamato (Sakai City) 72 Osaka City 28 Osaka Port 490 Hyogo Pref. 29 Offshore of Himeji 172 Kobe City 30 Kobe Port (center) 120 Wakayama Pref. 31 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 15 Okayama Pref. 31 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 15 Okayama Pref. 33 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 15 Okayama Pref. 36 Offshore of Mizushima 7 Hiroshima Pref. 37 Aimana Bay 172 Yamaguchi Pref. 38 Mouth of Riv. Yoshino (Tokushima City) 7 Kagawa Pref. 39 Takamatu Port 160 Kochi Pref. 40 Mouth of Riv. Shimanto (Shimanto City) 130 Saga Pref. 41 Dokai Bay 130 Saga Pref. 42 Imari Bay 130 Nagasaki Pref. 43 Mouth of Riv. Shimanto (Shimanto City) 28 Miyazaki Pref. 44 Hiraki-bashi Bridge, Riv. Midori (Uto City) 28 Miyazaki Pref. 45 Mouth of Riv. Oyodo (Miyazaki City) 10 Kagoshima Pref. 46 Mouth of Riv. Oyodo (Miyazaki City) 10 Miyazaki Pref. 47 Mouth of Riv. Oyodo (Miyazaki City) 10 Miyazaki Pref. 48 Mouth of Riv. Amori (Kirishima City) 10 Miyazaki Pref. 49 Mouth of Riv. Oyodo (Miyazaki City) 10 Miyazaki Pref. 49 Mi	Chiba City			75
13 Mouth of Riv. Sumida (Minato Ward) 990 Yokohama City 14 Yokohama Port 771 Kawasaki City 15 Keihin Canal, Port of Kawasaki 170 Niigata Pref. 16 Lower Riv. Shinano (Niigata City) 66 Toyama Pref. 17 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 172 Ishikawa Pref. 18 Mouth of Riv. Sai (Kanazawa City) 1,100 Nagano Pref. 19 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 1,100 Nagano Pref. 20 Lake Suwa (center) 5 Shizuoka Pref. 21 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) nd Aichi Pref. 22 Nagoya Port 180 Mie Pref. 23 Yokkaichi Port 32 Shiga Pref. 24 Lake Biwa (center, offshore of Karasaki) 5 5 Kyoto Pref. 25 Miyazu Port 180 Osaka Pref. 27 Mouth of Riv. Yamato (Sakai City) 72 Osaka City 28 Osaka Port 490 Hyogo Pref. 29 Offshore of Himeji 172 Kobe City 30 Kobe Port (center) 120 Wakayama Pref. 31 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 15 Okayama Pref. 31 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 15 Okayama Pref. 33 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 15 Okayama Pref. 36 Offshore of Mizushima 7 Hiroshima Pref. 37 Aimana Bay 172 Yamaguchi Pref. 38 Mouth of Riv. Yoshino (Tokushima City) 7 Kagawa Pref. 39 Takamatu Port 160 Kochi Pref. 40 Mouth of Riv. Shimanto (Shimanto City) 130 Saga Pref. 41 Dokai Bay 130 Saga Pref. 42 Imari Bay 130 Nagasaki Pref. 43 Mouth of Riv. Shimanto (Shimanto City) 28 Miyazaki Pref. 44 Hiraki-bashi Bridge, Riv. Midori (Uto City) 28 Miyazaki Pref. 45 Mouth of Riv. Oyodo (Miyazaki City) 10 Kagoshima Pref. 46 Mouth of Riv. Oyodo (Miyazaki City) 10 Miyazaki Pref. 47 Mouth of Riv. Oyodo (Miyazaki City) 10 Miyazaki Pref. 48 Mouth of Riv. Amori (Kirishima City) 10 Miyazaki Pref. 49 Mouth of Riv. Oyodo (Miyazaki City) 10 Miyazaki Pref. 49 Mi	Tokyo Met.	12	•	690
Kawasaki City 15 Keihin Canal, Port of Kawasaki 170 Niigata Pref. 16 Lower Riv. Shinano (Niigata City) 6 Toyama Pref. 17 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) tr(2) Ishikawa Pref. 18 Mouth of Riv. Sai (Kanazawa City) 330 Fukui Pref. 19 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 1,100 Nagano Pref. 20 Lake Suwa (center) 5 Shizuoka Pref. 21 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) nd Aichi Pref. 22 Nagoya Port 180 Mie Pref. 23 Yokkaichi Port 32 Shiga Pref. 24 Lake Biwa (center, offshore of Karasaki) 5 Kyoto City 26 Miyazu Port tr(2) Kyoto City 26 Miyazu Port tr(2) Kyoto City 26 Miyazu Port tr(2) Kyoto City 26 Miyazu Port 490 Osaka Pref. 27 Mouth of Riv. Yamato (Sakai City) 72 Osak	•	13		990
Niigata Pref. 16 Lower Riv. Shinano (Niigata City) 6 Toyama Pref. 17 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) tt(2) Ishikawa Pref. 18 Mouth of Riv. Sai (Kanazawa City) 330 Fukui Pref. 19 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 1,100 Nagano Pref. 20 Lake Suwa (center) 5 Shizuoka Pref. 21 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) nd Aichi Pref. 22 Nagoya Port 180 Mie Pref. 23 Yokkaichi Port 32 Shiga Pref. 24 Lake Biwa (center, offshore of Karasaki) 5 Kyoto Pref. 25 Miyazua Port tt(2) Kyoto City 26 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City) 510 Osaka Pref. 27 Mouth of Riv. Yamato (Sakai City) 72 Osaka City 28 Osaka Port 490 Hyogo Pref. 29 Offshore of Himeji tt(2) Wakayama Pref. 30 Kine kawa-ohashi Bridge, Mouth of Riv. Kinokawa	Yokohama City	14	Yokohama Port	71
Niigata Pref. 16	Kawasaki City	15	Keihin Canal, Port of Kawasaki	170
Toyama Pref. 17				6
Ishikawa Pref. 18 Mouth of Riv. Sai (Kanazawa City) 330 Fukui Pref. 19 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 1,100 Nagano Pref. 20 Lake Suwa (center) 5 Shizuoka Pref. 21 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) nd Aichi Pref. 22 Nagoya Port 180 Mie Pref. 23 Yokkaichi Port 32 Shiga Pref. 24 Lake Biwa (center, offshore of Karasaki) 5 Kyoto Pref. 25 Miyazu Dort tr(2) Kyoto City 26 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City) 510 Osaka Pref. 27 Mouth of Riv. Yamato (Sakai City) 72 Osaka Pref. 28 Offshore of Himeji tr(2) Kobe City 30 Kobe Port (center) 120 Wakayama Pref. 31 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 15 Okayama Pref. 32 Offshore of Mizushima 7 Hiroshima Pref. 33 Kure Port 7 Yamaguchi Pref. 35 Tokuyama Bay nd Goffshore of Ube tr(4) 7 Kagawa Pref. 39 Takamatsu Port 160 Kochi Pref. 40 Mouth of Riv. Yoshino (Tokushima City) 7 Kagawa Pref. 41 Mouth of Riv. Shimanto (Shimanto City) nd Nagasaki Pref. 43 Omura Bay nd Nagasaki Pref. 44 Hiraki-bashi Bridge, Riv. Midori (Uto City) 28 Miyazaki Pref. 45 Mouth of Riv. Oyodo (Miyazaki City) nd Kagoshima Pref. 45 Mouth of Riv. Oyodo (Miyazaki City) nd Kagoshima Pref. 45 Mouth of Riv. Oyodo (Miyazaki City) nd Kagoshima Pref. 46 Mouth of Riv. Oyodo (Miyazaki City) nd Kagoshima Pref. 46 Mouth of Riv. Oyodo (Miyazaki City) nd Kagoshima Pref. 46 Mouth of Riv. Oyodo (Miyazaki City) nd Kagoshima Pref. 47 Mouth of Riv. Oyodo (Miyazaki City) nd Kagoshima Pref. 48 Mouth of Riv. Oyodo (Miyazaki City) nd Kagoshima Pref. 49 Mouth of Riv. Oyodo (Miyazaki City) nd				tr(2)
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UKINAWA PIEL 48 INANA PORT 41	Okinawa Pref.	48	Naha Port	41

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

Detection frequency (sample) is based on the number of samples, 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/surface water (pg/L)

Monitored year: 2019

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

Detection limit : 0.2 Quantification limit : 0.6

	Aggregated value
Geometric mean	33
Median	26
Maximum	1,400
Minimum	2.2

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	9.5
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	2.8
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	120
Akita Pref.	4	Lake Hachiro	8.1
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	6.9
Fukushima Pref.	6	Onahama Port	93
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	24
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	35
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	41
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	42
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	67
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	610
·	13	Mouth of Riv. Sumida (Minato Ward)	1,100
Yokohama City	14	Yokohama Port	150
Kawasaki City	15	Keihin Canal, Port of Kawasaki	370
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	24
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	10
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	500
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1,400
Nagano Pref.		Lake Suwa (center)	16
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	9.1
Aichi Pref.	22	Nagoya Port	170
Mie Pref.	23	Yokkaichi Port	47
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	19
Kyoto Pref.		Miyazu Port	3.4
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	460
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	120
Osaka City	28	Osaka Port	640
Hyogo Pref.	29	Offshore of Himeji	13
Kobe City	30	Kobe Port (center)	130
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	27
Okayama Pref.	32	Offshore of Mizushima	14
Hiroshima Pref.	33	Kure Port	32
	34	Hiroshima Bay	14
Yamaguchi Pref.	35	Tokuyama Bay	6.0
	36	Offshore of Ube	6.4
	37	Offshore of Hagi	5.2
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	18
Kagawa Pref.	39	Takamatsu Port	180
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	2.9
Kitakyushu City	41	Dokai Bay	360
Saga Pref.	42	Imari Bay	3.6
Nagasaki Pref.	43	Omura Bay	3.6
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	38
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	2.2
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	2.8
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	5.4
Okinawa Pref.	48	Naha Port	64

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

Detection frequency (sample) is based on the number of samples, 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: 2019

Detection Frequency (site): 29/48 (Missing value: 0)
Detection Frequency (sample): 29/48 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.6

	Aggregated value
Geometric mean	tr(0.4)
Median	tr(0.3)
Maximum	7.0
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	1.7
Akita Pref.	4	Lake Hachiro	tr(0.2)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	2.2
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(0.4)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	0.7
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	1.9
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(0.5)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	4.7
·	13	Mouth of Riv. Sumida (Minato Ward)	6.8
Yokohama City	14	Yokohama Port	0.6
Kawasaki City	15	Keihin Canal, Port of Kawasaki	2.2
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(0.4)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	3.2
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	tr(0.2)
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	0.7
Mie Pref.	23	Yokkaichi Port	tr(0.2)
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	tr(0.5)
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	5.3
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	1.2
Osaka City	28	Osaka Port	7.0
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	0.8
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(0.5)
Okayama Pref.		Offshore of Mizushima	tr(0.2)
Hiroshima Pref.	33	Kure Port	tr(0.3)
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	2.2
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	2.7
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	0.6
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	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) 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: 2019

Detection Frequency (site): 12/48 (Missing value: 0)
Detection Frequency (sample): 12/48 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.6

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	1.4
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	tr(0.4)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(0.4)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	0.6
•	13	Mouth of Riv. Sumida (Minato Ward)	1.0
Yokohama City	14	Yokohama Port	tr(0.2)
Kawasaki City	15	Keihin Canal, Port of Kawasaki	tr(0.5)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(0.5)
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	1.4
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(0.4)
Osaka City		Osaka Port	0.9
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
·	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	tr(0.3)
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(0.5)
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
_	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	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: 2019

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

Detection limit : 0.3 Quantification limit : 0.7

	Aggregated value
Geometric mean	19
Median	24
Maximum	420
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	9.4
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	2.9
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	51
Akita Pref.	4	Lake Hachiro	19
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	9.1
Fukushima Pref.	6	Onahama Port	110
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	14
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	17
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	43
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	110
Chiba City		Mouth of Riv. Hanami (Chiba City)	27
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	200
·	13	Mouth of Riv. Sumida (Minato Ward)	340
Yokohama City	14	Yokohama Port	72
Kawasaki City	15	Keihin Canal, Port of Kawasaki	190
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	30
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	7.0
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	170
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	120
Nagano Pref.		Lake Suwa (center)	17
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	6.1
Aichi Pref.		Nagoya Port	68
Mie Pref.		Yokkaichi Port	24
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	24
Kyoto Pref.		Miyazu Port	1.1
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	420
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	110
Osaka City		Osaka Port	360
Hyogo Pref.	29	Offshore of Himeji	5.5
Kobe City	30	Kobe Port (center)	81
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	28
Okayama Pref.	32	Offshore of Mizushima	8.6
Hiroshima Pref.	33	Kure Port	41
	34	Hiroshima Bay	8.7
Yamaguchi Pref.	35	Tokuyama Bay	2.5
C	36	Offshore of Ube	2.1
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	9.2
Kagawa Pref.	39	Takamatsu Port	69
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	3.0
Kitakyushu City		Dokai Bay	180
Saga Pref.		Imari Bay	1.7
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	32
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	1.4
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	3.0
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	3.2
Okinawa Pref.		Naha Port	60

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

Detection frequency (sample) is based on the number of samples, 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: 2019

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

Detection limit: 0.3 Quantification limit: 0.7

	Aggregated value
Geometric mean	1.1
Median	1.0
Maximum	18
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	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	1.6
Akita Pref.	4	Lake Hachiro	1.1
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(0.6)
Fukushima Pref.	6	Onahama Port	9.9
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	0.8
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	1.2
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	2.8
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	9.9
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	1.3
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	5.7
-	13	Mouth of Riv. Sumida (Minato Ward)	10
Yokohama City	14	Yokohama Port	2.7
Kawasaki City	15	Keihin Canal, Port of Kawasaki	8.2
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	2.0
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.4)
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	7.1
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.6)
Nagano Pref.		Lake Suwa (center)	0.8
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(0.5)
Aichi Pref.	22	Nagoya Port	3.4
Mie Pref.	23	Yokkaichi Port	0.9
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	1.3
Kyoto Pref.	25	Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	18
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	6.9
Osaka City	28	Osaka Port	12
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	2.1
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1.6
Okayama Pref.	32	Offshore of Mizushima	tr(0.4)
Hiroshima Pref.	33	Kure Port	1.0
	34	Hiroshima Bay	tr(0.4)
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	tr(0.5)
Kagawa Pref.	39	Takamatsu Port	5.1
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	tr(0.3)
Kitakyushu City	41	Dokai Bay	9.6
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	2.1
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(0.4)
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	Naha Port	1.9

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

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

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

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

Monitored year: 2019

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

Detection limit : 0.3 Quantification limit : 0.7

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	1.2
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	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
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(0.5)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	tr(0.3)
, , , , , , , , , , , , , , , , , , , ,		Mouth of Riv. Sumida (Minato Ward)	tr(0.6)
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	tr(0.4)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(0.5)
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	25	Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	1.2
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	tr(0.3)
Osaka City	28	Osaka Port	nd
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
Ü	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(0.4)
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, 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.

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

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

Monitored year: 2019

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

Detection limit : 0.3 Quantification limit : 0.7

	Aggregated value
Geometric mean	3.0
Median	3.2
Maximum	65
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.4
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(0.6)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	5.0
Akita Pref.	4	Lake Hachiro	3.2
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	1.6
Fukushima Pref.	6	Onahama Port	22
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.2
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	2.6
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	7.9
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	26
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	3.9
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	29
	13	Mouth of Riv. Sumida (Minato Ward)	47
Yokohama City	14	Yokohama Port	9.5
Kawasaki City	15	Keihin Canal, Port of Kawasaki	30
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	5.0
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1.0
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	19
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.2
Nagano Pref.	20	Lake Suwa (center)	1.9
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	1.1
Aichi Pref.	22	Nagoya Port	8.2
Mie Pref.	23	Yokkaichi Port	3.1
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	3.8
Kyoto Pref.	25	Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	65
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	13
Osaka City	28	Osaka Port	40
Hyogo Pref.	29	Offshore of Himeji	0.9
Kobe City	30	Kobe Port (center)	8.3
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	4.3
Okayama Pref.	32	Offshore of Mizushima	1.4
Hiroshima Pref.	33	Kure Port	3.5
	34	Hiroshima Bay	1.2
Yamaguchi Pref.	35	Tokuyama Bay	tr(0.5)
	36	Offshore of Ube	tr(0.4)
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	1.3
Kagawa Pref.	39	Takamatsu Port	12
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	0.7
Kitakyushu City	41	Dokai Bay	23
Saga Pref.	42	Imari Bay	tr(0.5)
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	5.7
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	tr(0.4)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	1.1
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	0.9
Okinawa Pref.	48	Naha Port	6.1

⁽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.

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

Monitored year: 2019

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

Detection limit: 0.3 Quantification limit: 0.7

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	1.4
Minimum	nd

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Okinawa Pref. 48 Naha Port nd	Okinawa 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) 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: 2019

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

Detection limit: 0.3 Quantification limit: 0.7

	Aggregated value
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	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(0.5)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
·	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	tr(0.3)
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(0.3)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City		Osaka Port	tr(0.4)
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
Ü	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Saga Pref.		Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		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.

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

Monitored year: 2019

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

Detection limit: 0.9 Quantification limit: 2.4

	Aggregated value
Geometric mean	7.7
Median	8.3
Maximum	200
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	3.3
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	13
Akita Pref.	4	Lake Hachiro	9.4
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	2.7
Fukushima Pref.	6	Onahama Port	69
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	4.6
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	4.8
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	23
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	77
Chiba City		Mouth of Riv. Hanami (Chiba City)	7.0
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	51
-	13	Mouth of Riv. Sumida (Minato Ward)	67
Yokohama City	14	Yokohama Port	39
Kawasaki City	15	Keihin Canal, Port of Kawasaki	92
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	16
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	5.8
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	35
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(1.0)
Nagano Pref.		Lake Suwa (center)	5.7
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	17
Mie Pref.	23	Yokkaichi Port	8.9
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	10
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	200
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	64
Osaka City	28	Osaka Port	140
Hyogo Pref.	29	Offshore of Himeji	3.0
Kobe City	30	Kobe Port (center)	93
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	10
Okayama Pref.		Offshore of Mizushima	6.6
Hiroshima Pref.	33	Kure Port	42
	34	Hiroshima Bay	7.7
Yamaguchi Pref.	35	Tokuyama Bay	tr(1.4)
	36	Offshore of Ube	tr(1.1)
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	4.6
Kagawa Pref.	39	Takamatsu Port	37
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	62
Saga Pref.	42	Imari Bay	tr(1.3)
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	12
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(1.2)
Okinawa Pref.	48	Naha Port	97

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

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

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

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

Monitored year: 2019

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

Detection limit: 0.9 Quantification limit: 2.4

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	4.9
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	3.1
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(2.2)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	tr(1.1)
·	13	Mouth of Riv. Sumida (Minato Ward)	tr(1.3)
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	tr(1.7)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(1.1)
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	4.9
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City		Osaka Port	tr(1.9)
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	tr(1.2)
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(1.3)
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	Naha Port	tr(1.4)

(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.

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

Monitored year: 2019

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

Detection limit : 0.9 Quantification limit : 2.4

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(1.2)
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
-	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(1.2)
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	28	Osaka Port	nd
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
-	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	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.

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

Monitored year: 2019

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

Detection limit : 0.9 Quantification limit : 2.4

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(2.1)
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	tr(1.0)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
•	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City		Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(2.1)
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	28	Osaka Port	tr(1.3)
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
Ü	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	41	Dokai Bay	nd
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
<i>S</i>	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
	4/	Gotanda-basin Bridge, Kiv. Gotanda (tenikikusinkino 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).

Detection frequency (sample) is based on the number of samples, 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{[1-6-4] $3,3',4,4',5,5'-Hexachlorobiphenyl (\#169)/surface water (pg/L)}$

Monitored year: 2019

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

Detection limit : 0.9 Quantification limit : 2.4

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido		Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
Tokyo Wict.		Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City		Keihin Canal, Port of Kawasaki	nd
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.			
	22	Nagoya Port Yokkaichi Port	nd
Mie Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Shiga Pref. Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.			nd
		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	28	Osaka Port	nd
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	_	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
77 1'D C		Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	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.

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

Monitored year: 2019

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

Detection limit : 0.2 Quantification limit : 0.6

	Aggregated value
Geometric mean	2.7
Median	2.5
Maximum	67
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.2
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	4.7
Akita Pref.	4	Lake Hachiro	2.4
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(0.3)
Fukushima Pref.	6	Onahama Port	11
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1.2
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	1.5
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	5.4
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	14
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	1.8
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	11
-	13	Mouth of Riv. Sumida (Minato Ward)	13
Yokohama City	14	Yokohama Port	13
Kawasaki City	15	Keihin Canal, Port of Kawasaki	22
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	5.1
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	6.9
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	7.4
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.3)
Nagano Pref.		Lake Suwa (center)	0.9
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(0.2)
Aichi Pref.		Nagoya Port	4.1
Mie Pref.		Yokkaichi Port	2.2
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	2.1
Kyoto Pref.		Miyazu Port	tr(0.5)
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	31
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	19
Osaka City		Osaka Port	35
Hyogo Pref.	29	Offshore of Himeji	0.9
Kobe City	30	Kobe Port (center)	36
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	3.3
Okayama Pref.	32	Offshore of Mizushima	5.0
Hiroshima Pref.	33	Kure Port	20
	34	Hiroshima Bay	2.6
Yamaguchi Pref.	35	Tokuyama Bay	0.8
	36	Offshore of Ube	0.6
	37	Offshore of Hagi	tr(0.2)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	1.1
Kagawa Pref.	39	Takamatsu Port	9.3
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	tr(0.4)
Kitakyushu City		Dokai Bay	27
Saga Pref.	42	Imari Bay	1.9
Nagasaki Pref.	43	Omura Bay	0.6
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	3.6
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(0.2)
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	1.4
Okinawa Pref.	48	Naha Port	67

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

Detection frequency (sample) is based on the number of samples, 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.

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

Monitored year: 2019

Detection Frequency (site) : 34/48 (Missing value : 0)
Detection Frequency (sample) : 34/48 (Missing value : 0)

Detection limit : 0.2 Quantification limit : 0.6

	Aggregated value
Geometric mean	tr(0.5)
Median	tr(0.4)
Maximum	7.6
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	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(0.5)
Akita Pref.	4	Lake Hachiro	tr(0.5)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	2.1
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(0.3)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	0.9
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	1.9
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(0.3)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	1.3
-	13	Mouth of Riv. Sumida (Minato Ward)	1.4
Yokohama City	14	Yokohama Port	1.3
Kawasaki City	15	Keihin Canal, Port of Kawasaki	2.6
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	0.8
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	0.9
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	1.1
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	0.6
Mie Pref.	23	Yokkaichi Port	tr(0.4)
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	tr(0.4)
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	4.9
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	2.6
Osaka City	28	Osaka Port	4.3
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	3.3
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(0.5)
Okayama Pref.	32	Offshore of Mizushima	tr(0.5)
Hiroshima Pref.	33	Kure Port	1.9
	34	Hiroshima Bay	tr(0.2)
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	tr(0.2)
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	1.5
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	41	Dokai Bay	2.6
Saga Pref.	42	Imari Bay	tr(0.3)
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	0.7
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(0.3)
Okinawa Pref.	48	Naha Port	7.6

⁽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.

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

Monitored year: 2019

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

Detection limit : 0.2 Quantification limit : 0.6

	Aggregated value
Geometric mean	1.1
Median	0.8
Maximum	21
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	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	1.4
Akita Pref.	4	Lake Hachiro	0.9
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(0.3)
Fukushima Pref.	6	Onahama Port	3.3
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	0.6
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	0.7
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	1.8
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	3.4
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	0.8
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	3.4
-	13	Mouth of Riv. Sumida (Minato Ward)	3.6
Yokohama City	14	Yokohama Port	3.7
Kawasaki City	15	Keihin Canal, Port of Kawasaki	7.2
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	1.4
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	2.7
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	2.2
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.3)
Nagano Pref.		Lake Suwa (center)	0.6
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(0.2)
Aichi Pref.		Nagoya Port	1.0
Mie Pref.		Yokkaichi Port	0.8
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	0.7
Kyoto Pref.		Miyazu Port	tr(0.3)
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	8.5
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	5.6
Osaka City		Osaka Port	10
Hyogo Pref.	29	Offshore of Himeji	tr(0.3)
Kobe City	30	Kobe Port (center)	11
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1.2
Okayama Pref.	32	Offshore of Mizushima	1.2
Hiroshima Pref.	33	Kure Port	5.7
	34	Hiroshima Bay	0.8
Yamaguchi Pref.	35	Tokuyama Bay	tr(0.4)
Ū	36	Offshore of Ube	nd
	37	Offshore of Hagi	tr(0.2)
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	0.6
Kagawa Pref.	39	Takamatsu Port	2.9
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	tr(0.2)
Kitakyushu City		Dokai Bay	6.8
Saga Pref.	42	Imari Bay	0.8
Nagasaki Pref.	43	Omura Bay	tr(0.2)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	1.3
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(0.2)
-	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	0.6
Okinawa Pref.	48	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.

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

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

Monitored year: 2019

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

Detection limit : 0.2 Quantification limit : 0.6

	Aggregated value
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	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
1011/0111011		Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City		Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(0.3)
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	28	Osaka Port	tr(0.2)
Hyogo Pref.		Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
Tinosinina i ici.		Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
i amagucin i iei.	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kagawa Fref. Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	
	45		nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olrinov- Df	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	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) tr: Detection limit value and more, less than Quantification limit value.

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

Monitored year: 2019

Detection Frequency (site) : 35/48 (Missing value : 0) Detection Frequency (sample) : 35/48 (Missing value : 0)

Detection limit : 0.1 Quantification limit : 0.2

	Aggregated value
Geometric mean	0.3
Median	0.2
Maximum	14
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	0.6
Akita Pref.	4	Lake Hachiro	0.5
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	0.8
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.1)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	1.0
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	1.2
Chiba City		Mouth of Riv. Hanami (Chiba City)	0.2
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	1.4
·	13	Mouth of Riv. Sumida (Minato Ward)	1.7
Yokohama City	14	Yokohama Port	1.7
Kawasaki City	15	Keihin Canal, Port of Kawasaki	3.3
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	0.9
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1.5
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1.1
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	0.6
Mie Pref.		Yokkaichi Port	0.2
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	0.2
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	3.3
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	3.6
Osaka City		Osaka Port	5.4
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City		Kobe Port (center)	4.6
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	0.3
Okayama Pref.	32	Offshore of Mizushima	0.7
Hiroshima Pref.	33	Kure Port	3.2
	34	Hiroshima Bay	tr(0.1)
Yamaguchi Pref.	35	Tokuyama Bay	0.2
Ü	36	Offshore of Ube	tr(0.1)
	37	Offshore of Hagi	tr(0.1)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	2.0
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	4.2
Saga Pref.		Imari Bay	tr(0.1)
Nagasaki Pref.	43	Omura Bay	tr(0.1)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	0.6
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(0.1)
Okinawa Pref.		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.

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

Monitored year: 2019

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

Detection limit : 0.1 Quantification limit : 0.4

	Aggregated value
Geometric mean	tr(0.1)
Median	nd
Maximum	1.9
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.1)
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(0.1)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(0.2)
Akita Pref.	4	Lake Hachiro	tr(0.1)
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)	tr(0.2)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	1.6
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(0.2)
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	tr(0.2)
	13	Mouth of Riv. Sumida (Minato Ward)	tr(0.3)
Yokohama City	14	Yokohama Port	tr(0.1)
Kawasaki City	15	Keihin Canal, Port of Kawasaki	tr(0.3)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(0.3)
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	tr(0.1)
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	tr(0.1)
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	tr(0.1)
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	25	Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	0.6
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	1.0
Osaka City	28	Osaka Port	0.8
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	tr(0.3)
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	tr(0.2)
Hiroshima Pref.	33	Kure Port	tr(0.2)
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
•	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(0.2)
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	Naha Port	1.9

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

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

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

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

Monitored year: 2019

Detection Frequency (site): 34/48 (Missing value: 0)
Detection Frequency (sample): 34/48 (Missing value: 0)

Detection limit : 0.1 Quantification limit : 0.3

	Aggregated value
Geometric mean	tr(0.2)
Median	tr(0.1)
Maximum	4.6
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	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(0.1)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	0.3
Akita Pref.	4	Lake Hachiro	0.5
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
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)	tr(0.1)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	1.3
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	0.3
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	0.4
·	13	Mouth of Riv. Sumida (Minato Ward)	0.3
Yokohama City	14	Yokohama Port	0.9
Kawasaki City	15	Keihin Canal, Port of Kawasaki	0.4
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	0.5
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.1)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1.1
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.1)
Nagano Pref.		Lake Suwa (center)	tr(0.1)
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	tr(0.2)
Mie Pref.	23	Yokkaichi Port	tr(0.1)
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	tr(0.1)
Kyoto Pref.		Miyazu Port	tr(0.1)
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	0.4
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	0.4
Osaka City	28	Osaka Port	nd
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(0.1)
Okayama Pref.	32	Offshore of Mizushima	tr(0.1)
Hiroshima Pref.	33	Kure Port	tr(0.1)
	34	Hiroshima Bay	tr(0.1)
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	tr(0.1)
Kagawa Pref.	39	Takamatsu Port	0.4
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	4.6
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	0.3
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
-	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(0.1)
Okinawa Pref.	48	Naha Port	1.0

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

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.

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

Monitored year: 2019

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

Detection limit: 3 Quantification limit: 8

	Aggregated value
Geometric mean	10
Median	10
Maximum	630
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	26
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	13
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(6)
Akita Pref.	4	Lake Hachiro	11
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	18
Fukushima Pref.	6	Onahama Port	56
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	85
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	12
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	630
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	59
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	15
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	42
	13	Mouth of Riv. Sumida (Minato Ward)	9
Yokohama City	14	Yokohama Port	14
Kawasaki City	15	Keihin Canal, Port of Kawasaki	28
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	45
Toyama Pref.	17	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	15
Ishikawa Pref.	18	Mouth of Riv. Sai (Kanazawa City)	13
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	15
Nagano Pref.	20	Lake Suwa (center)	32
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(7)
Aichi Pref.	22	Nagoya Port	tr(4)
Mie Pref.	23	Yokkaichi Port	tr(5)
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	10
Kyoto Pref.	25	Miyazu Port	tr(4)
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	22
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	27
Osaka City	28	Osaka Port	13
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	tr(4)
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	18
Okayama Pref.	32	Offshore of Mizushima	tr(4)
Hiroshima Pref.	33	Kure Port	tr(3)
	34	Hiroshima Bay	tr(3)
Yamaguchi Pref.	35	Tokuyama Bay	tr(4)
	36	Offshore of Ube	tr(4)
	37	Offshore of Hagi	tr(3)
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	tr(6)
Kagawa Pref.	39	Takamatsu Port	tr(5)
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	tr(4)
Kitakyushu City	41	Dokai Bay	40
Saga Pref.	42	Imari Bay	tr(4)
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(6)
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	tr(4)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(6)
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(7)
Okinawa Pref.	48	Naha Port	tr(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.

[11] HCHs/surface water (pg/L)

Monitored year: 2019

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

Detection limit: *5 Quantification limit: *12

	Aggregated value
Geometric mean	170
Median	160
Maximum	1,300
Minimum	32

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	650
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	77
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	1,300
Akita Pref.	4	Lake Hachiro	530
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	210
Fukushima Pref.	6	Onahama Port	150
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	360
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	180
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	700
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	320
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	440
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	200
	13	Mouth of Riv. Sumida (Minato Ward)	240
Yokohama City	14	Yokohama Port	160
Kawasaki City	15	Keihin Canal, Port of Kawasaki	160
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	390
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	38
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	610
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	42
Nagano Pref.		Lake Suwa (center)	180
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	100
Aichi Pref.		Nagoya Port	150
Mie Pref.		Yokkaichi Port	83
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	380
Kyoto Pref.		Miyazu Port	72
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	380
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	1,200
Osaka City	28	Osaka Port	540
Hyogo Pref.	29	Offshore of Himeji	110
Kobe City		Kobe Port (center)	210
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	170
Okayama Pref.	32	Offshore of Mizushima	93
Hiroshima Pref.	33	Kure Port	69
	34	Hiroshima Bay	73
Yamaguchi Pref.	35	Tokuyama Bay	100
Ü	36	Offshore of Ube	93
	37	Offshore of Hagi	53
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	130
Kagawa Pref.	39	Takamatsu Port	130
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	37
Kitakyushu City	41	Dokai Bay	740
Saga Pref.	42	Imari Bay	76
Nagasaki Pref.	43	Omura Bay	67
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	180
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	66
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	86
5	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	380
Okinawa Pref.	48	Naha Port	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) *: Indicates the sum value of the Quantification [Detection] limits of each isomers.

[11-1] α -HCH/surface water (pg/L)

Monitored year: 2019

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

Detection limit : 2 Quantification limit : 4

	Aggregated value
Geometric mean	35
Median	37
Maximum	640
Minimum	tr(2)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	98
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	11
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	640
Akita Pref.	4	Lake Hachiro	83
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	75
Fukushima Pref.	6	Onahama Port	44
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	99
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	25
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	280
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	87
Chiba City		Mouth of Riv. Hanami (Chiba City)	200
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	60
·	13	Mouth of Riv. Sumida (Minato Ward)	57
Yokohama City	14	Yokohama Port	43
Kawasaki City	15	Keihin Canal, Port of Kawasaki	48
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	160
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	10
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	36
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	13
Nagano Pref.		Lake Suwa (center)	53
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	44
Aichi Pref.		Nagoya Port	43
Mie Pref.	23	Yokkaichi Port	19
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	88
Kyoto Pref.		Miyazu Port	14
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	61
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	330
Osaka City	28	Osaka Port	78
Hyogo Pref.	29	Offshore of Himeji	16
Kobe City	30	Kobe Port (center)	33
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	52
Okayama Pref.	32	Offshore of Mizushima	14
Hiroshima Pref.	33	Kure Port	13
	34	Hiroshima Bay	13
Yamaguchi Pref.	35	Tokuyama Bay	14
	36	Offshore of Ube	18
	37	Offshore of Hagi	6
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	22
Kagawa Pref.	39	Takamatsu Port	24
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	8
Kitakyushu City	41	Dokai Bay	220
Saga Pref.	42	Imari Bay	12
Nagasaki Pref.	43	Omura Bay	13
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	38
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	10
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	15
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	16
Okinawa Pref.	48	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) tr : Detection limit value and more, less than Quantification limit value.

[11-2] β -HCH/surface water (pg/L)

Monitored year: 2019

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

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	100
Median	92
Maximum	570
Minimum	17

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	480
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	22
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	380
Akita Pref.	4	Lake Hachiro	400
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	100
Fukushima Pref.	6	Onahama Port	93
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	160
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	99
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	230
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	180
Chiba City		Mouth of Riv. Hanami (Chiba City)	160
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	100
•	13	Mouth of Riv. Sumida (Minato Ward)	150
Yokohama City	14	Yokohama Port	92
Kawasaki City	15	Keihin Canal, Port of Kawasaki	87
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	180
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	22
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	86
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	17
Nagano Pref.		Lake Suwa (center)	100
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	44
Aichi Pref.		Nagoya Port	91
Mie Pref.		Yokkaichi Port	52
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	260
Kyoto Pref.		Miyazu Port	52
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	260
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	570
Osaka City		Osaka Port	410
Hyogo Pref.	29	Offshore of Himeji	88
Kobe City	30	Kobe Port (center)	160
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	100
Okayama Pref.	32	Offshore of Mizushima	73
Hiroshima Pref.	33	Kure Port	49
	34	Hiroshima Bay	53
Yamaguchi Pref.	35	Tokuyama Bay	84
Ü	36	Offshore of Ube	68
	37	Offshore of Hagi	43
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	97
Kagawa Pref.	39	Takamatsu Port	90
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	25
Kitakyushu City		Dokai Bay	410
Saga Pref.		Imari Bay	59
Nagasaki Pref.	43	Omura Bay	49
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	120
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	48
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	60
_	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	350
Okinawa Pref.	48	Naha Port	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.

[11-3] γ-HCH (synonym:Lindane) /surface water (pg/L)

Monitored year: 2019

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

Detection limit : 2 Quantification limit : 4

	Aggregated value
Geometric mean	14
Median	12
Maximum	480
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	44
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	5
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	170
Akita Pref.	4	Lake Hachiro	18
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	19
Fukushima Pref.	6	Onahama Port	12
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	90
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	47
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	160
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	34
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	64
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	30
•	13	Mouth of Riv. Sumida (Minato Ward)	26
Yokohama City	14	Yokohama Port	22
Kawasaki City	15	Keihin Canal, Port of Kawasaki	23
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	32
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	4
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	480
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(2)
Nagano Pref.		Lake Suwa (center)	13
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	8
Aichi Pref.		Nagoya Port	11
Mie Pref.		Yokkaichi Port	7
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	27
Kyoto Pref.		Miyazu Port	6
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	42
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	230
Osaka City		Osaka Port	34
Hyogo Pref.		Offshore of Himeji	7
Kobe City		Kobe Port (center)	13
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	12
Okayama Pref.		Offshore of Mizushima	6
Hiroshima Pref.		Kure Port	6
		Hiroshima Bay	6
Yamaguchi Pref.	35	Tokuyama Bay	5
		Offshore of Ube	5
		Offshore of Hagi	4
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	7
Kagawa Pref.	39	Takamatsu Port	8
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	tr(2)
Kitakyushu City		Dokai Bay	29
Saga Pref.		Imari Bay	4
Nagasaki Pref.	43	Omura Bay	4
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	17
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	6
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	6
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	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.

[11-4] δ -HCH/surface water (pg/L)

Monitored year: 2019

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

Detection limit : 0.4 Quantification limit : 1.0

	Aggregated value
Geometric mean	5.1
Median	5.3
Maximum	85
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	31
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	39
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	65
Akita Pref.	4	Lake Hachiro	28
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	19
Fukushima Pref.	6	Onahama Port	1.6
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	12
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	7.0
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	28
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	15
Chiba City		Mouth of Riv. Hanami (Chiba City)	21
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	7.3
,		Mouth of Riv. Sumida (Minato Ward)	6.0
Yokohama City	14	Yokohama Port	4.3
Kawasaki City	15	Keihin Canal, Port of Kawasaki	4.7
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	19
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	2.0
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	8.2
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	9.4
Nagano Pref.		Lake Suwa (center)	12
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	3.9
Aichi Pref.		Nagoya Port	4.7
Mie Pref.		Yokkaichi Port	4.5
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	7.8
Kyoto Pref.		Miyazu Port	tr(0.7)
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	13
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	53
Osaka City		Osaka Port	15
Hyogo Pref.		Offshore of Himeji	2.1
Kobe City		Kobe Port (center)	6.2
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	7.0
Okayama Pref.		Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	1.0
		Hiroshima Bay	1.1
Yamaguchi Pref.	35	Tokuyama Bay	1.3
Tumagaem Tren		Offshore of Ube	1.4
		Offshore of Hagi	tr(0.6)
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	2.2
Kagawa Pref.	39	Takamatsu Port	4.7
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	1.2
Kitakyushu City		Dokai Bay	85
Saga Pref.		Imari Bay	1.8
Nagasaki Pref.	43	Omura Bay	tr(0.5)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	5.7
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	2.3
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	4.6
Kagosiiiiia i lei.	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	4.9
Okinawa Pref.		Naha Port	nd
Okiliawa 1 ici.	40	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).

Detection frequency (sample) is based on the number of samples, 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 (B₄ - Br₁₀) /surface water (pg/L)

Monitored year: 2019

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

Detection limit: *19 Quantification limit: *48

	Aggregated value
Geometric mean	130
Median	140
Maximum	2,400
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	670
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(21)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	440
Akita Pref.	4	Lake Hachiro	48
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	210
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	340
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	72
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	370
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	330
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	130
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	520
	13	Mouth of Riv. Sumida (Minato Ward)	110
Yokohama City	14	Yokohama Port	140
Kawasaki City	15	Keihin Canal, Port of Kawasaki	170
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	730
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	520
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	330
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(40)
Nagano Pref.		Lake Suwa (center)	tr(45)
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(44)
Aichi Pref.		Nagoya Port	1,200
Mie Pref.	23	Yokkaichi Port	140
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	tr(44)
Kyoto Pref.		Miyazu Port	60
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	710
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	780
Osaka City	28	Osaka Port	2,400
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	tr(38)
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	360
Okayama Pref.	32	Offshore of Mizushima	50
Hiroshima Pref.	33	Kure Port	tr(21)
	34	Hiroshima Bay	74
Yamaguchi Pref.	35	Tokuyama Bay	1,200
	36	Offshore of Ube	100
	37	Offshore of Hagi	200
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	tr(28)
Kagawa Pref.	39	Takamatsu Port	550
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	200
Saga Pref.		Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	tr(22)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	270
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	100
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(35)
-	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	67
Okinawa Pref.	48	Naha Port	470

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

Detection frequency (sample) is based on the number of samples, 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) \ast : Indicates the sum value of the Quantification [Detection] limits of each congeners.

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

Monitored year: 2019

Detection Frequency (site): 39/48 (Missing value: 0)
Detection Frequency (sample): 39/48 (Missing value: 0)

Detection limit : 4 Quantification limit : 11

	Aggregated value
Geometric mean	tr(6)
Median	tr(6)
Maximum	320
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(7)
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(5)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	320
Akita Pref.	4	Lake Hachiro	tr(4)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(4)
Fukushima Pref.	6	Onahama Port	tr(6)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(4)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(4)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	17
Chiba City		Mouth of Riv. Hanami (Chiba City)	11
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	tr(9)
·	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	tr(7)
Kawasaki City	15	Keihin Canal, Port of Kawasaki	tr(7)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(7)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(6)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(6)
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(5)
Nagano Pref.		Lake Suwa (center)	tr(5)
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(6)
Aichi Pref.		Nagoya Port	tr(7)
Mie Pref.		Yokkaichi Port	tr(5)
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	tr(5)
Kyoto Pref.		Miyazu Port	tr(6)
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(8)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	11
Osaka City		Osaka Port	tr(8)
Hyogo Pref.	29	Offshore of Himeji	tr(7)
Kobe City	30	Kobe Port (center)	tr(6)
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(6)
Okayama Pref.	32	Offshore of Mizushima	tr(6)
Hiroshima Pref.	33	Kure Port	tr(7)
	34	Hiroshima Bay	tr(4)
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	41	Dokai Bay	nd
Saga Pref.	42	Imari Bay	tr(7)
Nagasaki Pref.	43	Omura Bay	tr(6)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(7)
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	tr(7)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(6)
-	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(7)
Okinawa Pref.	48	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 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) /surface water (pg/L)

Monitored year: 2019

Detection Frequency (site) : 39/48 (Missing value : 0) Detection Frequency (sample) : 39/48 (Missing value : 0)

Detection limit : 4 Quantification limit : 11

	Aggregated value
Geometric mean	tr(6)
Median	tr(6)
Maximum	310
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(7)
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(5)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	310
Akita Pref.	4	Lake Hachiro	tr(4)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(4)
Fukushima Pref.	6	Onahama Port	tr(6)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(4)
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(4)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	17
Chiba City		Mouth of Riv. Hanami (Chiba City)	11
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	tr(9)
·	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	tr(7)
Kawasaki City	15	Keihin Canal, Port of Kawasaki	tr(7)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(7)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(6)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(6)
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(5)
Nagano Pref.		Lake Suwa (center)	tr(5)
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(6)
Aichi Pref.		Nagoya Port	tr(7)
Mie Pref.		Yokkaichi Port	tr(5)
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	tr(5)
Kyoto Pref.		Miyazu Port	tr(6)
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(8)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	11
Osaka City		Osaka Port	tr(8)
Hyogo Pref.	29	Offshore of Himeji	tr(7)
Kobe City		Kobe Port (center)	tr(6)
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(6)
Okayama Pref.	32	Offshore of Mizushima	tr(6)
Hiroshima Pref.	33	Kure Port	tr(7)
	34	Hiroshima Bay	tr(4)
Yamaguchi Pref.	35	Tokuyama Bay	nd
Ü	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Saga Pref.		Imari Bay	tr(7)
Nagasaki Pref.	43	Omura Bay	tr(6)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(7)
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	tr(7)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(6)
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(7)
Okinawa Pref.		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 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/surface water (pg/L)

Monitored year: 2019

Detection Frequency (site) : 19/48 (Missing value : 0) Detection Frequency (sample) : 19/48 (Missing value : 0)

Detection limit : 2 Quantification limit : 6

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	69
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(3)
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(2)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	69
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	tr(4)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(2)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	13
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	7
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	tr(5)
	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	tr(3)
Kawasaki City	15	Keihin Canal, Port of Kawasaki	tr(3)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(4)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	8
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(3)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(4)
Osaka City		Osaka Port	tr(3)
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(2)
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	tr(2)
	36	Offshore of Ube	tr(2)
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	41	Dokai Bay	nd
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	6
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
_	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	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.

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

Monitored year: 2019

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

Detection limit : 2 Quantification limit : 6

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	42
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(3)
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(2)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	42
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	tr(4)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(2)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	10
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(4)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	tr(3)
	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	tr(3)
Kawasaki City	15	Keihin Canal, Port of Kawasaki	tr(3)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(4)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	tr(3)
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(3)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(4)
Osaka City		Osaka Port	tr(3)
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(2)
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	tr(2)
	36	Offshore of Ube	tr(2)
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	41	Dokai Bay	nd
Saga Pref.	42	Imari Bay	tr(2)
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(2)
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(2)
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(3)
Okinawa Pref.	48	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) tr: Detection limit value and more, less than Quantification limit value.

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

Monitored year: 2019

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

Detection limit: 1 Quantification limit: 2

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	8
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	4
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
·	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	8
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	3
Osaka City		Osaka Port	tr(1)
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
-	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	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.

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

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

Monitored year: 2019

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

Detection limit: 1 Quantification limit: 2

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	3
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	2
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
1011/011101		Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	tr(1)
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	3
Osaka City	28	Osaka Port	tr(1)
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
Tinosinina i ici.		Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
i amagucin i iei.	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	
Saga Pref.	42	Imari Bay	nd nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	
	45		nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
Olrinov Df	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd tr(1)
Okinawa Pref.	48	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) tr : Detection limit value and more, less than Quantification limit value.

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

Monitored year: 2019

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

Detection limit: 1 Quantification limit: 2

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	2
Minimum	nd

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

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

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

Monitored year: 2019

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

Detection limit : 2 Quantification limit : 4

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	6
Minimum	nd

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

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

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

Monitored year: 2019

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

Detection limit : 2 Quantification limit : 4

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	6
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	6
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
-	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	28	Osaka Port	nd
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	41	Dokai Bay	nd
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	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.

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

Monitored year: 2019

Detection Frequency (site): 12/48 (Missing value: 0) Detection Frequency (sample): 12/48 (Missing value: 0)

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	14
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	14
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	5
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	8
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
·	13	Mouth of Riv. Sumida (Minato Ward)	tr(2)
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	5
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	4
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	6
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	4
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	9
Osaka City		Osaka Port	8
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	tr(2)
	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	tr(1)
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	41	Dokai Bay	nd
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	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.

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

Monitored year: 2019

Detection Frequency (site): 27/48 (Missing value: 0)
Detection Frequency (sample): 27/48 (Missing value: 0)

Detection limit: 3 Quantification limit: 8

	Aggregated value
Geometric mean	tr(7)
Median	8
Maximum	150
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	86
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	23
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	19
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(7)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	19
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	19
Chiba City		Mouth of Riv. Hanami (Chiba City)	8
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	37
·	13	Mouth of Riv. Sumida (Minato Ward)	8
Yokohama City	14	Yokohama Port	15
Kawasaki City	15	Keihin Canal, Port of Kawasaki	12
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	27
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	40
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	26
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	62
Mie Pref.		Yokkaichi Port	8
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	61
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	67
Osaka City		Osaka Port	150
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	26
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	64
	36	Offshore of Ube	nd
	37	Offshore of Hagi	16
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	35
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	16
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	12
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
-	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(7)
Okinawa Pref.	48	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.

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

Monitored year: 2019

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

Detection limit : 6 Quantification limit : 14

	Aggregated value
Geometric mean	110
Median	99
Maximum	2,200
Minimum	tr(10)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	560
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	14
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	53
Akita Pref.	4	Lake Hachiro	44
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	14
Fukushima Pref.	6	Onahama Port	170
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	320
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	59
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	350
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	260
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	100
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	470
•	13	Mouth of Riv. Sumida (Minato Ward)	97
Yokohama City	14	Yokohama Port	120
Kawasaki City	15	Keihin Canal, Port of Kawasaki	150
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	690
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	470
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	290
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	35
Nagano Pref.	20	Lake Suwa (center)	40
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	38
Aichi Pref.	22	Nagoya Port	1,100
Mie Pref.	23	Yokkaichi Port	130
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	39
Kyoto Pref.	25	Miyazu Port	54
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	630
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	690
Osaka City	28	Osaka Port	2,200
Hyogo Pref.	29	Offshore of Himeji	tr(11)
Kobe City	30	Kobe Port (center)	32
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	330
Okayama Pref.	32	Offshore of Mizushima	44
Hiroshima Pref.	33	Kure Port	14
	34	Hiroshima Bay	70
Yamaguchi Pref.	35	Tokuyama Bay	1,100
	36	Offshore of Ube	98
	37	Offshore of Hagi	180
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	28
Kagawa Pref.	39	Takamatsu Port	510
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	tr(12)
Kitakyushu City	41	Dokai Bay	180
Saga Pref.	42	Imari Bay	tr(10)
Nagasaki Pref.	43	Omura Bay	tr(10)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	250
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	94
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	29
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	53
Okinawa Pref.	48	Naha Port	440

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

Detection frequency (sample) is based on the number of samples, 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.

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

Monitored year: 2019

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

Detection limit : 30 Quantification limit : 80

	Aggregated value
Geometric mean	290
Median	260
Maximum	2,500
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	180
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(50)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	270
Akita Pref.	4	Lake Hachiro	470
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	200
Fukushima Pref.	6	Onahama Port	tr(50)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	990
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	1,300
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	560
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	980
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	1,500
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	1,100
•	13	Mouth of Riv. Sumida (Minato Ward)	1,400
Yokohama City	14	Yokohama Port	1,300
Kawasaki City	15	Keihin Canal, Port of Kawasaki	1,200
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	360
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	110
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1,700
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	150
Nagano Pref.		Lake Suwa (center)	410
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	130
Aichi Pref.		Nagoya Port	530
Mie Pref.	23	Yokkaichi Port	210
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	490
Kyoto Pref.		Miyazu Port	tr(30)
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	2,500
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	1,400
Osaka City	28	Osaka Port	1,500
Hyogo Pref.	29	Offshore of Himeji	220
Kobe City	30	Kobe Port (center)	920
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	220
Okayama Pref.	32	Offshore of Mizushima	180
Hiroshima Pref.	33	Kure Port	280
	34	Hiroshima Bay	240
Yamaguchi Pref.	35	Tokuyama Bay	tr(60)
	36	Offshore of Ube	tr(70)
	37	Offshore of Hagi	tr(30)
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	180
Kagawa Pref.	39	Takamatsu Port	290
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	90
Kitakyushu City		Dokai Bay	240
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	260
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	690
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	260
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	120
-	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	220
Okinawa Pref.	48	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.

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

Monitored year: 2019

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

Detection limit: 40 Quantification limit: 90

	Aggregated value
Geometric mean	1,000
Median	900
Maximum	11,000
Minimum	160

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1,100
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	170
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	640
Akita Pref.	4	Lake Hachiro	2,000
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	560
Fukushima Pref.	6	Onahama Port	380
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	4,300
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	1,600
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	2,900
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	3,100
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	3,500
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	2,100
•	13	Mouth of Riv. Sumida (Minato Ward)	1,100
Yokohama City	14	Yokohama Port	1,700
Kawasaki City	15	Keihin Canal, Port of Kawasaki	4,700
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	1,100
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	320
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	10,000
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	630
Nagano Pref.		Lake Suwa (center)	610
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	330
Aichi Pref.	22	Nagoya Port	780
Mie Pref.	23	Yokkaichi Port	1,000
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	3,600
Kyoto Pref.		Miyazu Port	490
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	11,000
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	10,000
Osaka City	28	Osaka Port	8,900
Hyogo Pref.	29	Offshore of Himeji	870
Kobe City	30	Kobe Port (center)	2,200
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,500
Okayama Pref.	32	Offshore of Mizushima	580
Hiroshima Pref.	33	Kure Port	360
	34	Hiroshima Bay	350
Yamaguchi Pref.	35	Tokuyama Bay	210
	36	Offshore of Ube	390
	37	Offshore of Hagi	300
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	690
Kagawa Pref.	39	Takamatsu Port	920
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	190
Kitakyushu City		Dokai Bay	1,800
Saga Pref.	42	Imari Bay	420
Nagasaki Pref.	43	Omura Bay	2,500
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	1,300
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	700
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	230
_	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	400
Okinawa Pref.	48	Naha Port	160

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

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

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

Monitored year: 2019

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

Detection limit : 2 Quantification limit : 6

	Aggregated value
Geometric mean	9
Median	7
Maximum	360
Minimum	tr(2)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	21
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	7
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	6
Akita Pref.	4	Lake Hachiro	7
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	13
Fukushima Pref.	6	Onahama Port	13
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	81
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	9
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	360
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	73
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	38
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	80
,		Mouth of Riv. Sumida (Minato Ward)	20
Yokohama City	14	Yokohama Port	29
Kawasaki City	15	Keihin Canal, Port of Kawasaki	46
Niigata Pref.		Lower Riv. Shinano (Niigata City)	29
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	15
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	12
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	11
Nagano Pref.		Lake Suwa (center)	32
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(4)
Aichi Pref.		Nagoya Port	14
Mie Pref.	23	Yokkaichi Port	tr(4)
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	6
Kyoto Pref.		Miyazu Port	tr(2)
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	46
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	16
Osaka City	28	Osaka Port	13
Hyogo Pref.	29	Offshore of Himeji	tr(3)
Kobe City		Kobe Port (center)	tr(4)
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	6
Okayama Pref.	32	Offshore of Mizushima	tr(3)
Hiroshima Pref.	_	Kure Port	tr(3)
Tinosinina Tier.	34	Hiroshima Bay	tr(3)
Yamaguchi Pref.	35	Tokuyama Bay	tr(4)
ramaguem r iei.	36	Offshore of Ube	tr(3)
	37	Offshore of Hagi	tr(2)
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	7
Kagawa Pref.	39	Takamatsu Port	tr(4)
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	tr(2)
Kitakyushu City		Dokai Bay	18
Saga Pref.		Imari Bay	tr(4)
Nagasaki Pref.	43	Omura Bay	tr(2)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(5)
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	tr(3)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(4)
Kagosiiilia 1101.	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(4)
Okinawa Pref.	48	Naha Port	tr(3)
Okinawa 1 ICI.	70	1 talia 1 Oft	u(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.

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

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

Monitored year: 2019

Detection Frequency (site): 32/48 (Missing value: 0)
Detection Frequency (sample): 32/48 (Missing value: 0)

Detection limit: *7.5 Quantification limit: *24

	Aggregated value
Geometric mean	tr(14)
Median	tr(12)
Maximum	260
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(8.1)
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	160
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	tr(19)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	35
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	38
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	190
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	97
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	tr(14)
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	26
•		Mouth of Riv. Sumida (Minato Ward)	49
Yokohama City	14	Yokohama Port	72
Kawasaki City	15	Keihin Canal, Port of Kawasaki	260
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	32
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	71
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(11)
Nagano Pref.		Lake Suwa (center)	tr(8.5)
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	tr(18)
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	tr(15)
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	82
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	64
Osaka City	28	Osaka Port	57
Hyogo Pref.	29	Offshore of Himeji	25
Kobe City	30	Kobe Port (center)	tr(8.3)
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(9.4)
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	tr(7.8)
	34	Hiroshima Bay	tr(8.9)
Yamaguchi Pref.	35	Tokuyama Bay	tr(16)
	36	Offshore of Ube	tr(11)
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(17)
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	tr(12)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(16)
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	Naha Port	tr(16)

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

Detection frequency (sample) is based on the number of samples, 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) \ast : Indicates the sum value of the Quantification [Detection] limits of each congeners.

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

Monitored year: 2019

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

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	3
Median	3
Maximum	18
Minimum	tr(1)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	3
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(1)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	5
Akita Pref.	4	Lake Hachiro	tr(1)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(1)
Fukushima Pref.	6	Onahama Port	11
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	7
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(1)
Gunma Pref.		Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	3
Saitama Pref.		Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	5
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(1)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	tr(2)
ı		Mouth of Riv. Sumida (Minato Ward)	tr(2)
Yokohama City	14	Yokohama Port	5
Kawasaki City	15	Keihin Canal, Port of Kawasaki	6
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(2)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(2)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	3
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	4
Nagano Pref.		Lake Suwa (center)	3
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(1)
Aichi Pref.		Nagoya Port	10
Mie Pref.		Yokkaichi Port	5
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	tr(2)
Kyoto Pref.		Miyazu Port	10
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	3
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	3
Osaka City		Osaka Port	3
Hyogo Pref.		Offshore of Himeji	18
Kobe City		Kobe Port (center)	4
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(2)
Okayama Pref.		Offshore of Mizushima	3
Hiroshima Pref.		Kure Port	3
111100111111111111111111111111111111111		Hiroshima Bay	4
Yamaguchi Pref.	35	Tokuyama Bay	13
i amagacini i ici.		Offshore of Ube	7
		Offshore of Hagi	7
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(2)
Kagawa Pref.	39	Takamatsu Port	3
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	tr(2)
Kitakyushu City		Dokai Bay	5
Saga Pref.		Imari Bay	4
Nagasaki Pref.	43	Omura Bay	9
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(2)
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	tr(2)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(1)
	70	i i	
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	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) tr : Detection limit value and more, less than Quantification limit value.

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

Monitored year: 2019

Detection Frequency (site) : 35/48 (Missing value : 0) Detection Frequency (sample) : 35/48 (Missing value : 0)

Detection limit: 1 Quantification limit: 4

	Aggregated value
Geometric mean	tr(2)
Median	tr(2)
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	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	11
Akita Pref.	4	Lake Hachiro	tr(2)
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)	6
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(2)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	5
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	6
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	tr(1)
,		Mouth of Riv. Sumida (Minato Ward)	tr(3)
Yokohama City	14	Yokohama Port	8
Kawasaki City	15	Keihin Canal, Port of Kawasaki	8
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(1)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(1)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	5
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(3)
Nagano Pref.		Lake Suwa (center)	tr(2)
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	5
Mie Pref.		Yokkaichi Port	tr(1)
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	tr(1)
Kyoto Pref.		Miyazu Port	5
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	6
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	4
Osaka City		Osaka Port	tr(2)
Hyogo Pref.		Offshore of Himeji	5
Kobe City		Kobe Port (center)	tr(2)
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(2)
Okayama Pref.		Offshore of Mizushima	tr(1)
Hiroshima Pref.		Kure Port	tr(2)
1111 0511111111 1 1 1 1 1 1		Hiroshima Bay	tr(2)
Yamaguchi Pref.	35	Tokuyama Bay	tr(3)
i amagacini i ici.		Offshore of Ube	nd
		Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	tr(1)
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(1)
Saga Pref.		Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	tr(3)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	4
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
ragosinila i ici.	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		Naha Port	nd
Okiliawa 1 ici.	40	Ivalia 1 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).

Detection frequency (sample) is based on the number of samples, 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] Trichlorinated naphthalenes/surface water (pg/L)

Monitored year: 2019

Detection Frequency (site) : 36/48 (Missing value : 0) Detection Frequency (sample) : 36/48 (Missing value : 0)

Detection limit: 1 Quantification limit: 4

	Aggregated value
Geometric mean	tr(3)
Median	tr(2)
Maximum	60
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(3)
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(1)
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	26
Akita Pref.	4	Lake Hachiro	4
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(2)
Fukushima Pref.	6	Onahama Port	tr(3)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	7
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	4
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	18
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	10
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(2)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	13
,		Mouth of Riv. Sumida (Minato Ward)	21
Yokohama City	14	Yokohama Port	23
Kawasaki City	15	Keihin Canal, Port of Kawasaki	60
Niigata Pref.		Lower Riv. Shinano (Niigata City)	4
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	18
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(2)
Nagano Pref.		Lake Suwa (center)	4
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(1)
Aichi Pref.		Nagoya Port	tr(3)
Mie Pref.		Yokkaichi Port	tr(1)
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	tr(1)
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	14
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	7
Osaka City		Osaka Port	16
Hyogo Pref.		Offshore of Himeji	tr(2)
Kobe City		Kobe Port (center)	tr(2)
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(2)
Okayama Pref.		Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	tr(3)
1111 0011111111 1 1011		Hiroshima Bay	tr(3)
Yamaguchi Pref.	35	Tokuyama Bay	nd
i amagacini i Ici.		Offshore of Ube	4
		Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	tr(2)
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	4
Saga Pref.		Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(2)
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
ragosinila i ici.	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		Naha Port	tr(2)
Okiliawa i ici.	40	Ivalia I Oit	u(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.

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

Monitored year: 2019

Detection Frequency (site): 22/48 (Missing value: 0)
Detection Frequency (sample): 22/48 (Missing value: 0)

Detection limit : 2 Quantification limit : 6

	Aggregated value
Geometric mean	tr(3)
Median	nd
Maximum	170
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	100
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)	6
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	23
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	62
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	34
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	8
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	8
•	13	Mouth of Riv. Sumida (Minato Ward)	19
Yokohama City	14	Yokohama Port	29
Kawasaki City	15	Keihin Canal, Port of Kawasaki	170
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	15
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	33
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(2)
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	40
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	35
Osaka City		Osaka Port	28
Hyogo Pref.		Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(2)
Okayama Pref.		Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
		Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
		Offshore of Ube	nd
		Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(2)
Saga Pref.		Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	6
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	tr(2)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(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.

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

Monitored year: 2019

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

Detection limit : 0.6 Quantification limit : 1.6

	Aggregated value
Geometric mean	tr(1.1)
Median	nd
Maximum	50
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	18
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)	6.6
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	8.1
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	50
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	37
Chiba City		Mouth of Riv. Hanami (Chiba City)	2.1
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	2.0
-	13	Mouth of Riv. Sumida (Minato Ward)	4.1
Yokohama City	14	Yokohama Port	6.9
Kawasaki City	15	Keihin Canal, Port of Kawasaki	14
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	9.8
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	12
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.8)
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	18
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	15
Osaka City	28	Osaka Port	8.3
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(1.0)
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	tr(0.9)
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	41	Dokai Bay	2.9
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	1.7
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	tr(0.7)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(1.4)
Okinawa Pref.	48	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.

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

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

Monitored year: 2019

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

Detection limit : 0.8 Quantification limit : 2.1

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	32
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(2.0)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	32
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	4.7
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
•	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	tr(0.9)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City		Osaka Port	nd
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
C	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(1.0)
Saga Pref.		Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.		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.

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

Monitored year: 2019

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

Detection limit : 0.6 Quantification limit : 1.5

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	14
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	14
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(0.8)
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
·	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City		Osaka Port	nd
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(1.2)
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
_	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	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.

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

Monitored year: 2019

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

Detection limit : 0.5 Quantification limit : 1.4

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	3.1
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	3.1
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
1011/01/101		Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City		Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	28	Osaka Port	
			nd
Hyogo Pref. Kobe City		Offshore of Himeji Kobe Port (center)	nd
Wakayama Pref.		, ,	nd
Okayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima	nd
Hiroshima Pref.	32	Kure Port	nd
Hirosiiiiia Piei.			nd
77 1'D C		Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
T 1 1' D 6	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	48	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.

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

Monitored year: 2019

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

Detection limit: *30 Quantification limit: *90

	Aggregated value
Geometric mean	tr(70)
Median	tr(50)
Maximum	3,700
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	170
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	270
Akita Pref.	4	Lake Hachiro	tr(40)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	400
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	640
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	3,700
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	820
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	180
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	450
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	310
·	13	Mouth of Riv. Sumida (Minato Ward)	140
Yokohama City	14	Yokohama Port	140
Kawasaki City	15	Keihin Canal, Port of Kawasaki	310
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	120
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	430
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	110
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	tr(50)
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(30)
Aichi Pref.		Nagoya Port	240
Mie Pref.	23	Yokkaichi Port	240
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	90
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	360
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	410
Osaka City	28	Osaka Port	160
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	230
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
	36	Offshore of Ube	nd
	37	Offshore of Hagi	120
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	tr(40)
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(50)
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(50)
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(30)
Okinawa Pref.	48	Naha Port	tr(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

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

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

Monitored year: 2019

Detection Frequency (site): 32/48 (Missing value: 0)
Detection Frequency (sample): 32/48 (Missing value: 0)

Detection limit : 20 Quantification limit : 60

	Aggregated value
Geometric mean	tr(60)
Median	tr(50)
Maximum	3,500
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	110
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	260
Akita Pref.	4	Lake Hachiro	tr(40)
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	370
Fukushima Pref.	6	Onahama Port	tr(20)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	590
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	3,500
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	680
Saitama Pref.		Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	90
Chiba City		Mouth of Riv. Hanami (Chiba City)	360
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	210
-	13	Mouth of Riv. Sumida (Minato Ward)	120
Yokohama City	14	Yokohama Port	120
Kawasaki City	15	Keihin Canal, Port of Kawasaki	280
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	80
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	410
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	110
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	tr(50)
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(30)
Aichi Pref.		Nagoya Port	240
Mie Pref.		Yokkaichi Port	230
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	60
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	270
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	370
Osaka City		Osaka Port	130
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	210
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
Ü	36	Offshore of Ube	nd
		Offshore of Hagi	120
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	tr(40)
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(50)
Saga Pref.		Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(50)
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(30)
Okinawa Pref.		Naha Port	tr(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.

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

Monitored year: 2019

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

Detection limit: 10 Quantification limit: 30

	Aggregated value
Geometric mean	tr(10)
Median	nd
Maximum	210
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	60
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	tr(10)
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	30
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	50
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	210
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	140
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	80
Chiba City		Mouth of Riv. Hanami (Chiba City)	90
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	100
•	13	Mouth of Riv. Sumida (Minato Ward)	tr(20)
Yokohama City	14	Yokohama Port	tr(20)
Kawasaki City	15	Keihin Canal, Port of Kawasaki	30
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	40
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(20)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	tr(10)
Shiga Pref.	_	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	30
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	90
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	40
Osaka City		Osaka Port	30
Hyogo Pref.		Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(20)
Okayama Pref.		Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
		Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
		Offshore of Ube	nd
		Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Saga Pref.		Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
	47	Gotanda-bashi Bridge, 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.

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

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

Monitored year: 2019

Detection Frequency (site): 13/48 (Missing value: 0)
Detection Frequency (sample): 13/48 (Missing value: 0)

Detection limit: *1,600 Quantification limit: *4,300

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	78,000
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	78,000
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)	43,000
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	tr(2,700)
•	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	tr(3,800)
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(2,200)
Osaka City		Osaka Port	nd
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	tr(1,800)
Ü	36	Offshore of Ube	tr(2,000)
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Saga Pref.		Imari Bay	tr(2,400)
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(3,600)
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	tr(3,100)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(1,600)
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(1,900)
Okinawa Pref.		Naha Port	tr(2,900)

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

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

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

Monitored year: 2019

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

Detection limit : 200 Quantification limit : 600

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

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(200)
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	2,300
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(400)
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	tr(500)
•	13	Mouth of Riv. Sumida (Minato Ward)	tr(400)
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	700
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	tr(300)
Osaka City	28	Osaka Port	tr(300)
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
		Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	tr(300)
Tuningueni Tren	36	Offshore of Ube	tr(300)
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Saga Pref.	42	Imari Bay	tr(300)
Nagasaki Pref.	43	Omura Bay	tr(200)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	600
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	tr(300)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(300)
		• • • • • • • • • • • • • • • • • • • •	
	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(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.

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

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

Monitored year: 2019

Detection Frequency (site): 19/48 (Missing value: 0)
Detection Frequency (sample): 19/48 (Missing value: 0)

Detection limit : 500 Quantification limit : 1,400

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	5,000
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(600)
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	3,700
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)	5,000
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(1,000)
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	tr(800)
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	tr(900)
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(600)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	2,200
·	13	Mouth of Riv. Sumida (Minato Ward)	tr(600)
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	tr(600)
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(500)
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	nd
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	tr(1,100)
Osaka City		Osaka Port	tr(700)
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
Ū	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	tr(500)
Saga Pref.	42	Imari Bay	tr(500)
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(1,000)
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	tr(600)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	nd
-	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(600)
Okinawa Pref.	48	Naha Port	tr(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.

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

Monitored year: 2019

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

Detection limit : 400 Quantification limit : 1,000

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	34,000
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(700)
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	1,000
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	34,000
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	tr(400)
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	14,000
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
-	13	Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	tr(700)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(400)
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	22	Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	tr(800)
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	tr(400)
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	tr(800)
Osaka City	28	Osaka Port	tr(400)
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City	30	Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.	33	Kure Port	nd
	34	Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	tr(800)
-	36	Offshore of Ube	tr(700)
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	41	Dokai Bay	nd
Saga Pref.	42	Imari Bay	tr(700)
Nagasaki Pref.	43	Omura Bay	tr(600)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	tr(600)
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	tr(700)
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(500)
-	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(500)
Okinawa Pref.	48	Naha Port	tr(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.

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

Monitored year: 2019

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

Detection limit : 500 Quantification limit : 1,300

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	38,000
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	38,000
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)	24,000
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	nd
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
,		Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(500)
Aichi Pref.		Nagoya Port	tr(1,000)
Mie Pref.	23	Yokkaichi Port	tr(600)
Shiga Pref.	-	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	3,400
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	28	Osaka Port	nd
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
		Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	tr(700)
	36	Offshore of Ube	tr(1,000)
ļ	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	tr(600)
Kagawa Pref.	39	Takamatsu Port	tr(700)
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Saga Pref.	42	Imari Bay	tr(900)
Nagasaki Pref.	43	Omura Bay	tr(600)
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	1,400
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	1,500
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	tr(800)
Ragosiiiiia Tici.	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	tr(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.

[24] Dicofol/surface water (pg/L)

Monitored year: 2019

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

Detection limit: 8

Quantification limit: 13

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	40
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(12)
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	nd
Akita Pref.	4	Lake Hachiro	nd
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	6	Onahama Port	nd
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	13
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	nd
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	nd
2 0.1.) 0 0.120.		Mouth of Riv. Sumida (Minato Ward)	nd
Yokohama City	14	Yokohama Port	nd
Kawasaki City	15	Keihin Canal, Port of Kawasaki	nd
Niigata Pref.		Lower Riv. Shinano (Niigata City)	40
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.	20	Lake Suwa (center)	nd
Shizuoka Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Nagoya Port	nd
Mie Pref.	23	Yokkaichi Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	nd
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	28	Osaka Port	nd
Hyogo Pref.	29	Offshore of Himeji	nd
Kobe City		Kobe Port (center)	nd
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	32	Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	nd
Tinosiniia Tier.		Hiroshima Bay	nd
Yamaguchi Pref.	35	Tokuyama Bay	nd
ramagaciii r ici.	36	Offshore of Ube	nd
	37	Offshore of Hagi	nd
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	39	Takamatsu Port	nd
Kagawa Fref. Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	nd
Saga Pref.	42	Imari Bay	nd
Nagasaki Pref.	43	Omura Bay	nd
Kumamoto Pref.	43	Hiraki-bashi Bridge, Riv. Midori (Uto City)	nd
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	
Kagosiiilla Piel.		Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	nd
Okinova Dasf	47		nd
Okinawa Pref.	48	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.

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

Monitored year: 2019

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

Detection limit : 30 Quantification limit : 60

	Aggregated value
Geometric mean	150
Median	120
Maximum	1,800
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	130
Iwate Pref.	2	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	80
Akita Pref.	4	Lake Hachiro	100
Yamagata Pref.	5	Mouth of Riv. Mogami (Sakata City)	120
Fukushima Pref.	6	Onahama Port	tr(30)
Ibaraki Pref.	7	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	850
Tochigi Pref.	8	Tagawa Kyubun Area Head Works (Utsunomiya City)	790
Gunma Pref.	9	Tone-ozeki Weir, Riv. Tone (Chiyoda Town)	330
Saitama Pref.	10	Akigase-shusuizeki Weir, Riv. Arakawa (Shiki City)	850
Chiba City	11	Mouth of Riv. Hanami (Chiba City)	720
Tokyo Met.	12	Mouth of Riv. Arakawa (Koto Ward)	560
-	13	Mouth of Riv. Sumida (Minato Ward)	690
Yokohama City	14	Yokohama Port	620
Kawasaki City	15	Keihin Canal, Port of Kawasaki	640
Niigata Pref.	16	Lower Riv. Shinano (Niigata City)	160
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	70
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1,800
Fukui Pref.	19	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Nagano Pref.		Lake Suwa (center)	120
Shizuoka Pref.	21	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	70
Aichi Pref.	22	Nagoya Port	180
Mie Pref.	23	Yokkaichi Port	60
Shiga Pref.	24	Lake Biwa (center, offshore of Karasaki)	260
Kyoto Pref.		Miyazu Port	80
Kyoto City	26	Miyamae-bashi Bridge, Riv. Katsura (Kyoto City)	1,400
Osaka Pref.	27	Mouth of Riv. Yamato (Sakai City)	650
Osaka City	28	Osaka Port	610
Hyogo Pref.	29	Offshore of Himeji	80
Kobe City	30	Kobe Port (center)	270
Wakayama Pref.	31	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	120
Okayama Pref.	32	Offshore of Mizushima	90
Hiroshima Pref.	33	Kure Port	100
	34	Hiroshima Bay	90
Yamaguchi Pref.	35	Tokuyama Bay	tr(50)
	36	Offshore of Ube	70
	37	Offshore of Hagi	tr(40)
Tokushima Pref.	38	Mouth of Riv. Yoshino (Tokushima City)	60
Kagawa Pref.	39	Takamatsu Port	130
Kochi Pref.	40	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	90
Saga Pref.	42	Imari Bay	tr(50)
Nagasaki Pref.	43	Omura Bay	150
Kumamoto Pref.	44	Hiraki-bashi Bridge, Riv. Midori (Uto City)	750
Miyazaki Pref.	45	Mouth of Riv. Oyodo (Miyazaki City)	90
Kagoshima Pref.	46	Shinkawa-bashi Bridge, Riv. Amori (Kirishima City)	110
-	47	Gotanda-bashi Bridge, Riv. Gotanda (Ichikikushikino City)	90
Okinawa Pref.	48	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.

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

Monitored year: 2019

Detection Frequency (site) : 61/61 (Missing value : 0) Detection Frequency (sample) : 48/48 (Missing value : 0)

Detection limit: *3.3 Quantification limit: *12

	Aggregated value
Geometric mean	5,700
Median	7,900
Maximum	640,000
Minimum	37

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	910
	2	Tomakomai Port	7,900
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	62
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	4,100
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	170
Akita Pref.	6	Lake Hachiro	3,000
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	1,500
Fukushima Pref.	8	Onahama Port	31,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	3,500
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	740
Chiba Pref.	11	Coast of Ichihara and Anegasaki	34,000
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	310
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	75,000
	14	Mouth of Riv. Sumida (Minato Ward)	310,000
Yokohama City		Yokohama Port	130,000
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	110,000
	17	Keihin Canal, Port of Kawasaki	230,000
Niigata Pref.		Lower Riv. Shinano (Niigata City)	180
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1,400
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	11,000
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	530
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	120
Nagano Pref.	23	Lake Suwa (center)	7,100
Shizuoka Pref.	24	Shimizu Port	16,000
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	130
Aichi Pref.	26	Kinuura Port	19,000
	27	Nagoya Port	23,000
Mie Pref.	28	Yokkaichi Port	91,000
	29	Toba Port	27,000
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	8,300
	31	Lake Biwa (center, offshore of Karasaki)	20,000
Kyoto Pref.	32	Miyazu Port	1,800
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	7,900
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	20,000
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	640,000
·		Mouth of Riv. Yodo (Osaka City)	130,000
	37	Osaka Port	93,000
	38	Outside Osaka Port	47,000
Hyogo Pref.	39	Offshore of Himeji	15,000
Kobe City	40	Kobe Port (center)	290,000
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	320
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	13,000
Okayama Pref.	43	Offshore of Mizushima	3,300
Hiroshima Pref.	44	Kure Port	100,000
.,·		Hiroshima Bay	21,000
Yamaguchi Pref.	46		4,800
5	47	Offshore of Ube	5,100
		Offshore of Hagi	940
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	230
Kagawa Pref.	50	Takamatsu Port	63,000
Ehime Pref.		Niihama Port	250
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	260
Kitakyushu City	53	Dokai Bay	320,000
Fukuoka City		Hakata Bay	8,500
Saga Pref.	55	•	6,700
Nagasaki Pref.		Omura Bay	8,100
Oita Pref.		Mouth of Riv. Oita (Oita City)	390
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	37
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	62
Nagosiiilla Fiel.	60	Riv. Gotanda (Ichikikushikino City)	48
Okinawa Pref.	61	Naha Port	110,000
OKIIIAWA FICI.	UI	Ivana i Oit	110,000

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

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 congeners.

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

Monitored year: 2019

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

Detection limit : 0.4 Quantification limit : 1.1

	Aggregated value
Geometric mean	34
Median	74
Maximum	1,800
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	6.2
	2	Tomakomai Port	44
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	78
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)	4.5
Fukushima Pref.	8	Onahama Port	440
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	31
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	200
Chiba City		Mouth of Riv. Hanami (Chiba City)	1.7
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	350
		Mouth of Riv. Sumida (Minato Ward)	1,800
Yokohama City		Yokohama Port	1,300
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	74
N" - D C		Keihin Canal, Port of Kawasaki	1,600
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(0.5)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	590
Ishikawa Pref.	+	Mouth of Riv. Sai (Kanazawa City)	16
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	16 tr(0.9)
Yamanashi Pref.	22	87 \ 37	
Nagano Pref.	_	Lake Suwa (center)	76
Shizuoka Pref.	24	Shimizu Port Velestayle hashi Bridge Biy, Tanguy (Iyyata City)	92
Aichi Pref.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port	tr(0.4)
Alcili Piel.		Nagova Port	
Mie Pref.		Yokkaichi Port	180 340
Mile Fiel.		Toba Port	74
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	52
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	120
Kyoto Pref.		Miyazu Port	29
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	99
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	82
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	1,700
osana ong		Mouth of Riv. Yodo (Osaka City)	830
		Osaka Port	250
	38	Outside Osaka Port	260
Hyogo Pref.	39	Offshore of Himeji	170
Kobe City	40	Kobe Port (center)	430
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(0.9)
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	370
Okayama Pref.	43	Offshore of Mizushima	56
Hiroshima Pref.	44	Kure Port	170
	45	Hiroshima Bay	140
Yamaguchi Pref.	46		70
	47	Offshore of Ube	43
	48	Offshore of Hagi	11
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	170
Ehime Pref.	_	Niihama Port	3.9
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	2.5
Kitakyushu City	53	Dokai Bay	740
Fukuoka City		Hakata Bay	70
Saga Pref.	55		56
Nagasaki Pref.		Omura Bay	86
Oita Pref.		Mouth of Riv. Oita (Oita City)	2.8
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	tr(0.7)
01: 5 0	60	Riv. Gotanda (Ichikikushikino City)	2.2
Okinawa Pref.	61	Naha Port	230

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

Detection frequency (sample) is based on the number of samples, 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

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

Monitored year: 2019

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

Detection limit : 0.2 Quantification limit : 0.6

	Aggregated value
Geometric mean	310
Median	400
Maximum	26,000
Minimum	2.3

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	72
	2	Tomakomai Port	1,100
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	2.3
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	440
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	5.5
Akita Pref.	6	Lake Hachiro	56
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	29
Fukushima Pref.	8	Onahama Port	4,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	190
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	41
Chiba Pref.		Coast of Ichihara and Anegasaki	1,200
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	13
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	4,100
		Mouth of Riv. Sumida (Minato Ward)	14,000
Yokohama City		Yokohama Port	4,000
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	1,200
		Keihin Canal, Port of Kawasaki	5,300
Niigata Pref.		Lower Riv. Shinano (Niigata City)	12
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	50
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	400
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	26
Yamanashi Pref.	_	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	5.9
Nagano Pref.		Lake Suwa (center)	220
Shizuoka Pref.		Shimizu Port	1,400
Aichi Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	8.5
Aichi Prei.		Kinuura Port	920
Mie Pref.		Nagoya Port Yokkaichi Port	2,100 5,200
WHE FIEL.		Toba Port	360
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	240
Siliga i ici.		Lake Biwa (center, offshore of Karasaki)	1,200
Kyoto Pref.		Miyazu Port	150
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	960
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	4,500
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	26,000
		Mouth of Riv. Yodo (Osaka City)	8,100
		Osaka Port	4,700
		Outside Osaka Port	3,100
Hyogo Pref.	39	Offshore of Himeji	1,500
Kobe City	40	Kobe Port (center)	6,000
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	30
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	4,300
Okayama Pref.	43	Offshore of Mizushima	360
Hiroshima Pref.	44	Kure Port	1,700
	45	Hiroshima Bay	1,500
Yamaguchi Pref.	46	- Aya a ay	320
	47		350
	48	Offshore of Hagi	59
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	11
Kagawa Pref.		Takamatsu Port	3,500
Ehime Pref.	_	Niihama Port	28
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	19
Kitakyushu City	53	Dokai Bay	5,900
Fukuoka City		Hakata Bay	560
Saga Pref.	_	Imari Bay	350
Nagasaki Pref.		Omura Bay	520
Oita Pref.		Mouth of Riv. Oita (Oita City)	66
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	5.0
Kagoshima Pref.		Riv. Amori (Kirishima City)	5.3
Olrinor Df		Riv. Gotanda (Ichikikushikino City)	2.100
Okinawa Pref.	61	Naha Port	3,100

⁽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.

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

Monitored year: 2019

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

Detection limit: 0.3 Quantification limit: 0.7

	Aggregated value
Geometric mean	980
Median	1,100
Maximum	180,000
Minimum	4.8

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	170
	2	Tomakomai Port	1,100
Iwate Pref.		Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	4.8
Miyagi Pref.		Sendai Bay (Matsushima Bay)	560
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	28
Akita Pref.		Lake Hachiro	190
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	170
Fukushima Pref.	8	Onahama Port	7,800
Ibaraki Pref.		Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	800
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	310
Chiba Pref.		Coast of Ichihara and Anegasaki	6,400
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	70
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	27,000
	_	Mouth of Riv. Sumida (Minato Ward)	84,000
Yokohama City		Yokohama Port	16,000
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	13,000
		Keihin Canal, Port of Kawasaki	33,000
Niigata Pref.		Lower Riv. Shinano (Niigata City)	45
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	130
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	2,900
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	120
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	10
Nagano Pref.	23	Lake Suwa (center)	950
Shizuoka Pref.		Shimizu Port	5,300
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	25
Aichi Pref.		Kinuura Port	3,500
	27	Nagoya Port	7,000
Mie Pref.		Yokkaichi Port	26,000
	29	Toba Port	890
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	1,000
	31	Lake Biwa (center, offshore of Karasaki)	3,700
Kyoto Pref.		Miyazu Port	340
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	2,900
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	3,000
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	180,000
	36	Mouth of Riv. Yodo (Osaka City)	34,000
		Osaka Port	24,000
		Outside Osaka Port	
** D C	38	Outside Osaka Fort	9,000
Hyogo Pref.	39	Offshore of Himeji	3,500
Hyogo Pref. Kobe City	39		
	39 40 41	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town)	3,500
Kobe City	39 40 41	Offshore of Himeji Kobe Port (center)	3,500 27,000
Kobe City Nara Pref.	39 40 41 42	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town)	3,500 27,000 25
Kobe City Nara Pref. Wakayama Pref.	39 40 41 42 43	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	3,500 27,000 25 1,700
Kobe City Nara Pref. Wakayama Pref. Okayama Pref.	39 40 41 42 43 44	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima	3,500 27,000 25 1,700 530
Kobe City Nara Pref. Wakayama Pref. Okayama Pref.	39 40 41 42 43 44 45	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port	3,500 27,000 25 1,700 530 6,600
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref.	39 40 41 42 43 44 45 46	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay	3,500 27,000 25 1,700 530 6,600 3,500
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref.	39 40 41 42 43 44 45 46 47	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay	3,500 27,000 25 1,700 530 6,600 3,500 610
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref.	39 40 41 42 43 44 45 46 47	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube	3,500 27,000 25 1,700 530 6,600 3,500 610 870
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref.	39 40 41 42 43 44 45 46 47 48 49	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi	3,500 27,000 25 1,700 530 6,600 3,500 610 870 110
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref.	39 40 41 42 43 44 45 46 47 48 49 50	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	3,500 27,000 25 1,700 530 6,600 3,500 610 870 110 44
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref.	39 40 41 42 43 44 45 46 47 48 49 50	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port	3,500 27,000 25 1,700 530 6,600 3,500 610 870 110 44 24,000
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref.	39 40 41 42 43 44 45 46 47 48 49 50 51	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port	3,500 27,000 25 1,700 530 6,600 3,500 610 870 110 44 24,000 60
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref.	39 40 41 42 43 44 45 46 47 48 49 50 51 52 53	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City)	3,500 27,000 25 1,700 530 6,600 3,500 610 870 110 44 24,000 60 41
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City	39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay	3,500 27,000 25 1,700 530 6,600 3,500 610 870 110 44 24,000 60 41 57,000
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City Fukuoka City	39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay	3,500 27,000 25 1,700 530 6,600 3,500 610 870 110 44 24,000 60 41 57,000 1,800
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City Fukuoka City Saga Pref.	39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay Omura Bay	3,500 27,000 25 1,700 530 6,600 3,500 610 870 110 44 24,000 60 41 57,000 1,800 1,400
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref.	39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay Omura Bay Mouth of Riv. Oita (Oita City)	3,500 27,000 25 1,700 530 6,600 3,500 610 870 110 44 24,000 60 41 57,000 1,800 1,400
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref.	39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port 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)	3,500 27,000 25 1,700 530 6,600 3,500 610 870 110 44 24,000 60 41 57,000 1,800 1,400 1,400 180
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref. Miyazaki Pref.	39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay Omura Bay Mouth of Riv. Oita (Oita City)	3,500 27,000 25 1,700 530 6,600 3,500 610 870 110 44 24,000 60 41 57,000 1,800 1,400 1,400 180 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.

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

Monitored year: 2019

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

Detection limit : 0.2 Quantification limit : 0.5

	Aggregated value
Geometric mean	1,200
Median	1,500
Maximum	200,000
Minimum	8.7

Hokkido	Local communities	No.	Monitored sites	Measured value
Naute Pref. 3 Toyosawa Hridge, Riv. Toyosawa (Hanamaki City) 14	Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	
Miyagi Pref. 4 Sendai Bay (Matsushima Bay) 8.20 Sendai City 5 Hirose-Obsubaib Bridge, Riv. Hirose (Sendai City) 25 Akita Pref. 6 Lake Hachiro 500 10		2		1,900
Sendai City	Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	14
Akita Pref. 6 Lake Hachiro 500 7 7 Mouth Of Riv. Mogami (Sakuta City) 210 Fukushima Pref. 7 Mouth Of Riv. Mogami (Sakuta City) 210 Fukushima Pref. 8 200 10 10 10 10 10 10 1		4		820
Vanuagan Pref. Felixushtima Pref. Bouth of Riv. Mogami (Sakata City) 8.200	Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	25
Fukushima Pref. 8				
Ibaraki Pref. 9 Tonekamome-obasi Bridge, Mouth of Riv. Tone (Kamisu City) 240				
Tochig Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) 240 240 270				
Chiba Perf. 11 Coast of Ichibara and Anegasski 9,700 Chiba City 12 Mouth of Riv. Hanami (Chiba City) 83 Tokyo Met. 13 Mouth of Riv. Hanami (Chiba City) 24,000 Yokohama City 15 Yokohama Port 27,000 Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 29,000 Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 29,000 Nigata Pref. 18 Lower Riv. Shinano (Niigata City) 52 Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Shi (Kanazawa City) 4,000 Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 4,000 Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Shono (Tsuruga City) 17 Nagano Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 17 Nagano Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) 17 Nagano Pref. 23 Lake Suwa (center) 3,000 Mie Pref. 26 Kinurua Port 5,300 Alichi Pref. <td></td> <td></td> <td></td> <td>·</td>				·
Chiba City	ŭ			
Tokyo Met. 13 Mouth of Riv. Sumida (Minato Ward) 120,000			č	
Mouth of Riv. Sumida (Minato Ward) 120,000				
Yokohama City	i okyo Met.		\ /	
Kawasaki City	Voltahama City			
17 Keihin Canal, Port of Kawasaki 55,000 52				·
Niigata Pref. 18	Kawasaki City			
Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 4,000	Niigata Pref			·
Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) 300				
Fuku Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 17	. ,			
Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) 17 Nagano Pref. 23 Lake Suwa (center) 1,500 Shizuoka Pref. 24 Shimizu Port 5,200 Shizuoka Pref. 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 34 Aichi Pref. 26 Kinuura Port 5,300 Aichi Pref. 28 Yokkaichi Port 30,000 Me Pref. 28 Yokkaichi Port 30,000 Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 1,200 Shiga Pref. 31 Lake Biwa (center, offshore of Karasaki) 4,000 Kyoto City 33 Miyama-bashi Bridge, Riv. Chatsura (Kyoto City) 1,500 Osaka City 34 Mouth of Riv. Yamato (Sakai City) 3,600 Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 30,000 37 Osaka Port 25,000 38 Outside Osaka Port 9,500 39 Offshore of Himeji 3,200 Kobe City 40 Kobe Port (center) 30,000 Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) 63 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv.				
Nagano Pref. 23 Lake Suwa (center) 1,500				
Shizuoka Pref. 24 Shimizu Port 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 34		_	B / 1/	
Aich Pref. 26 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 5,300 Aich Pref. 28 Yokkaichi Port 7,000 Mie Pref. 28 Yokkaichi Port 30,000 29 Toba Port 1,200 1,200 31 Lake Biwa (center, offshore of Minamihira) 1,900 32 Kyoto Pref. 32 Miyama-bashi Bridge, Riv. Katsura (Kyoto City 33 Miyama-bashi Bridge, Riv. Katsura (Kyoto City 34 Mouth of Riv. Yamato (Sakai City) 3,600 Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 3,600 Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 3,000 36 Mouth of Riv. Yodo (Osaka City) 3,000 37 Osaka Port 25,000 38 Outside Osaka Port 25,000 40 Kobe City 40 Kobe Port (center) 3,200 Kobe City 40 Kobe Port (center) 3,200 Wakayama Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) 63 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 2,600 Wakayama Pref. 43 Offshore of Mizushima Bay 3,600 Yamaguchi Pref. 46 Tokuyama Bay 3,600 Yamaguchi Pref. 47 Taisho-bashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 5,80 Kagawa Pref. 50 Takamatsu Port 12,000 1,200 Kagawa Pref. 51 Niihama Port 5,500 5,80 Kagawa Pref. 52 Mouth of Riv. Yoshino (Tokushima City) 5,50 Saga Pref. 55 Mouth of Riv. Shimanto (Shimanto City) 5,20 Saga Pref. 55 Mouth of Riv. Shimanto (Shimanto City) 5,20 Saga Pref. 55 Mouth of Riv. Oyodo (Miyazaki City) 8,2 Miyazaki Pref. 57 Mouth of Riv. Oyodo (Miyazaki City) 8,2 Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) 8,2 Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) 9,0	ŭ		,	
Aichi Pref. 26 Kimuura Port 5,300 Mie Pref. 27 Nagoya Port 7,000 Mie Pref. 28 Yokaichi Port 30,000 Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 1,900 Shiga Pref. 32 Miyazu Port 330 Kyoto City 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) 1,600 Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 3,600 Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 30,000 Osaka City 36 Mouth of Riv. Yamato (Sakai City) 30,000 37 Osaka Port 25,000 38 Outside Osaka Port 9,500 Hyogo Pref. 39 Offshore of Himeji 3,200 Kobe City 40 Kobe Port (center) 30,000 Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) 63 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 2,600 Okayama Pref. 45	Singuona 1101.			
Mie Pref. 28 Yokkaichi Port 30,000	Aichi Pref.			
Mie Pref. 28 Yokkaichi Port 30,000				
Shiga Pref. 30	Mie Pref.			30,000
Syoto Pref. 32 Miyazu Port 330 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) 3,600 360 360 360 360 370 370 380 370 380 370 380		29	Toba Port	1,200
Kyoto Pref. 32 Miyazu Port 330 Kyoto City 33 Miyazuane-bashi Bridge,Riv. Katsura (Kyoto City) 1,600 Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 2,000 Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 200,000 36 Mouth of Riv. Yodo (Osaka City) 30,000 37 Osaka Port 9,500 Hyogo Pref. 39 Offshore of Himeji 3,200 Kobe City 40 Kobe Port (center) 30,000 Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) 63 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 2,600 Okayama Pref. 43 Offshore of Mizushima 460 Hiroshima Pref. 44 Kure Port 12,000 Yamaguchi Pref. 45 Hiroshima Bay 3,600 Yamaguchi Pref. 46 Tokuyama Bay 580 Kagawa Pref. 49 Mouth of Riv. Yoshino (Tokushima City) 58 Kagawa Pref. <td< td=""><td>Shiga Pref.</td><td>30</td><td>Lake Biwa (center, offshore of Minamihira)</td><td>1,900</td></td<>	Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	1,900
Kyoto City 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) 1,600 Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 3,600 Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 30,000 36 Mouth of Riv. Yodo (Osaka City) 30,000 37 Osaka Port 25,000 38 Outside Osaka Port 9,500 Hyogo Pref. 39 Offshore of Himeji 3,200 Kobe City 40 Kobe Port (center) 30,000 Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) 63 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 2,600 Okayama Pref. 43 Offshore of Mizushima 460 Hiroshima Pref. 44 Kure Port 12,000 45 Hiroshima Bay 3,600 Yamaguchi Pref. 46 Tokuyama Bay 580 47 Offshore of Ube 1,300 48 Toffshore of Hagi 140 Tokushima Pref. 49 <td></td> <td>31</td> <td>Lake Biwa (center, offshore of Karasaki)</td> <td>4,000</td>		31	Lake Biwa (center, offshore of Karasaki)	4,000
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36 Mouth of Riv. Yodo (Osaka City) 30,000 37 Osaka Port 25,000 38 Outside Osaka Port 9,500 320				3,600
37 Osaka Port 25,000 38 Outside Osaka Port 9,500 9,500 19,5	Osaka City			
38 Outside Osaka Port 9,500			\ 2/	
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Okayama Pref. 43 Offshore of Mizushima 460 Hiroshima Pref. 44 Kure Port 12,000 45 Hiroshima Bay 3,600 Yamaguchi Pref. 46 Tokuyama Bay 580 47 Offshore of Ube 1,300 48 Offshore of Hagi 140 Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) 58 Kagawa Pref. 50 Takamatsu Port 21,000 Ehime Pref. 51 Niihama Port 55 Kochi Pref. 52 Mouth of Riv. Shimanto (Shimanto City) 52 Kitakyushu City 53 Dokai Bay 120,000 Fukuoka City 54 Hakata Bay 2,500 Saga Pref. 55 Imari Bay 940 Nagasaki Pref. 56 Omura Bay 1,400 Oita Pref. 57 Mouth of Riv. Oita (Oita City) 82 Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) 8.7 Kagoshima Pref. 59 Riv. Amori (Kirishima City) 9.0				
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	•			
Okinawa Pref. 61 Naha Port 14,000		60	Riv. Gotanda (Ichikikushikino City)	9.0
	Okinawa Pref.	61	Naha Port	14,000

⁽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: 2019

Detection Frequency (site): 60/61 (Missing value: 0)
Detection Frequency (sample): 60/61 (Missing value: 0)

Detection limit : 0.2 Quantification limit : 0.5

	Aggregated value
Geometric mean	27
Median	31
Maximum	3,200
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	4.4
	2	Tomakomai Port	28
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(0.4)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	21
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	0.5
Akita Pref.	6	Lake Hachiro	18
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	4.6
Fukushima Pref.	8	Onahama Port	170
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	23
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	5.1
Chiba Pref.		Coast of Ichihara and Anegasaki	300
Chiba City		Mouth of Riv. Hanami (Chiba City)	2.0
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	600
		Mouth of Riv. Sumida (Minato Ward)	2,900
Yokohama City		Yokohama Port	500
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	120
		Keihin Canal, Port of Kawasaki	870
Niigata Pref.		Lower Riv. Shinano (Niigata City)	1.8
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	5.5
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	68
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	0.6
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	0.6
Nagano Pref.		Lake Suwa (center)	76
Shizuoka Pref.	24	Shimizu Port	150
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	0.8
Aichi Pref.		Kinuura Port	130
	_	Nagoya Port	130
Mie Pref.		Yokkaichi Port	430
	_	Toba Port	23
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	65
		Lake Biwa (center, offshore of Karasaki)	210
Kyoto Pref.	_	Miyazu Port	9.7
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	31
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	120
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	3,200
		Mouth of Riv. Yodo (Osaka City)	540
		Osaka Port	610
** 5 0	38	Outside Osaka Port	290
Hyogo Pref.		Offshore of Himeji	290
Kobe City	1	Kobe Port (center)	440
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	1.5
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	310
Okayama Pref.	43	Offshore of Mizushima	12
Hiroshima Pref.		Kure Port	200
11 D C	45	Hiroshima Bay	78
Yamaguchi Pref.	46		17
	47	Offshore of Ube	18
m 1 1' D C		Offshore of Hagi	4.1
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	0.8
Kagawa Pref.	50	Takamatsu Port	430
Ehime Pref.		Niihama Port Mouth of Riv. Chimonto (Chimonto City)	2.0
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	1.5
Kitakyushu City	53	Dokai Bay	1,200
Fukuoka City		Hakata Bay	48
Saga Pref.	55	,	19
Nagasaki Pref.	_	Omura Bay	35
Oita Pref.		Mouth of Riv. Oita (Oita City)	2.0
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	tr(0.3)
011 7 0	60	Riv. Gotanda (Ichikikushikino City)	tr(0.3)
Okinawa Pref.	61	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) tr: Detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	3.1
Median	3.8
Maximum	300
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	0.7
	2	Tomakomai Port	3.8
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	2.3
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	3.4
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	1.2
Fukushima Pref.	8	Onahama Port	15
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.5
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.3)
Chiba Pref.		Coast of Ichihara and Anegasaki	15
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(0.3)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	30
77 1 1 C'	_	Mouth of Riv. Sumida (Minato Ward)	100
Yokohama City	15		43
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	80
Nii t - Du-f	-	Keihin Canal, Port of Kawasaki	97
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(0.2)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	0.8
Ishikawa Pref. Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	6.0 nd
Yamanashi Pref.	22		-
		Lake Suwa (center)	nd 5.6
Nagano Pref. Shizuoka Pref.		Shimizu Port	8.0
Silizuoka Piei.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(0.2)
Aichi Pref.		Kinuura Port	11
Alcili Fiel.		Nagoya Port	9.8
Mie Pref.		Yokkaichi Port	50
when then.		Toba Port	4.6
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	9.0
Singa i ici.	31	Lake Biwa (center, offshore of Karasaki)	22
Kyoto Pref.	32		0.7
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	3.2
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	9.7
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	300
		Mouth of Riv. Yodo (Osaka City)	65
	37		49
	38	Outside Osaka Port	27
Hyogo Pref.	39	Offshore of Himeji	6.3
Kobe City	40	Kobe Port (center)	88
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(0.3)
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	6.4
Okayama Pref.	43	Offshore of Mizushima	1.0
Hiroshima Pref.	44	Kure Port	27
	45	Hiroshima Bay	6.8
Yamaguchi Pref.	46	Tokuyama Bay	1.2
	47	Offshore of Ube	1.9
	48		tr(0.3)
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(0.2)
Kagawa Pref.	50	Takamatsu Port	27
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(0.2)
Kitakyushu City	53	Dokai Bay	130
Fukuoka City	54		4.3
Saga Pref.	55	,	2.2
Nagasaki Pref.	56	· ·	2.8
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	33

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

Detection frequency (sample) is based on the number of samples, 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

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	1,100
Median	1,500
Maximum	120,000
Minimum	9.3

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	240
	2	Tomakomai Port	1,400
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	26
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	850
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	40
Akita Pref.	6	Lake Hachiro	1,200
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	580
Fukushima Pref.	8	Onahama Port	4,500
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	820
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	83
Chiba Pref.		Coast of Ichihara and Anegasaki	7,500
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	75
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	12,000
		Mouth of Riv. Sumida (Minato Ward)	61,000
Yokohama City		Yokohama Port	24,000
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	39,000
		Keihin Canal, Port of Kawasaki	58,000
Niigata Pref.		Lower Riv. Shinano (Niigata City)	43
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	200
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	2,000
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	61
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	42
Nagano Pref.	_	Lake Suwa (center)	2,100
Shizuoka Pref.		Shimizu Port	1,800
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	40
Aichi Pref.	26	Kinuura Port	4,100
	27	Nagoya Port	3,200
Mie Pref.		Yokkaichi Port	16,000
			2,200
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	2,600
		Lake Biwa (center, offshore of Karasaki)	6,000
Kyoto Pref.		Miyazu Port	290
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1,500
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	4,000
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	120,000
		Mouth of Riv. Yodo (Osaka City)	19,000
		Osaka Port	21,000
		Outside Osaka Port	12,000
Hyogo Pref.		Offshore of Himeji	2,800
Kobe City	_	Kobe Port (center)	44,000
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	94
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,800
Okayama Pref.		Offshore of Mizushima	290
Hiroshima Pref.		Kure Port	19,000
		Hiroshima Bay	3,900
Yamaguchi Pref.		Tokuyama Bay	600
			910
		1	140
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	72
Kagawa Pref.	_	Takamatsu Port	7,900
Ehime Pref.	51	Niihama Port	31
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	59
Kitakyushu City		,	66,000
Fukuoka City		Hakata Bay	1,800
Saga Pref.		Imari Bay	1,000
	_		1,500
Nagasaki Pref.		Mouth of Riv. Oita (Oita City)	29
Oita Pref.	57		
Oita Pref. Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	9.3
Oita Pref.	58 59	Mouth of Riv. Oyodo (Miyazaki City) Riv. Amori (Kirishima City)	9.3 19
Oita Pref. Miyazaki Pref.	58 59 60	Mouth of Riv. Oyodo (Miyazaki City)	9.3

⁽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.

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	71
Median	96
Maximum	8,000
Minimum	0.9

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	17
	2	Tomakomai Port	96
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	1.6
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	56
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	2.6
Akita Pref.	6	Lake Hachiro	78
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	32
Fukushima Pref.	8	Onahama Port	350
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	29
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	4.5
Chiba Pref.		Coast of Ichihara and Anegasaki	470
Chiba City		Mouth of Riv. Hanami (Chiba City)	5.9
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	550
V 1 1 C'		Mouth of Riv. Sumida (Minato Ward)	3,000
Yokohama City		Yokohama Port Mouth of Riv. Toma (Kawasaki City)	1,600
Kawasaki City		Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	2,300 4,700
Niigata Pref.		Lower Riv. Shinano (Niigata City)	2.9
Tovama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	16
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	130
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.8
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	3.1
Nagano Pref.		Lake Suwa (center)	130
Shizuoka Pref.		Shimizu Port	170
Sinzaoka i ici.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	3.5
Aichi Pref.		Kinuura Port	270
		Nagoya Port	190
Mie Pref.		Yokkaichi Port	880
	29	Toba Port	88
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	210
	31	Lake Biwa (center, offshore of Karasaki)	560
Kyoto Pref.		Miyazu Port	25
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	83
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	320
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	8,000
		Mouth of Riv. Yodo (Osaka City)	760
		Osaka Port	1,100
H Df		Outside Osaka Port	870
Hyogo Pref. Kobe City		Offshore of Himeji Kobe Port (center)	160 2,000
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	6.8
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	160
Okayama Pref.		Offshore of Mizushima	15
Hiroshima Pref.		Kure Port	580
1111 0511111111 1 1 0 1 1	45	Hiroshima Bay	180
Yamaguchi Pref.	46		25
	47		57
	48		8.7
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	4.2
Kagawa Pref.		Takamatsu Port	680
Ehime Pref.		Niihama Port	2.0
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	5.1
Kitakyushu City	53	Dokai Bay	6,000
Fukuoka City		Hakata Bay	150
Saga Pref.		Imari Bay	83
Nagasaki Pref.		Omura Bay	100
Oita Pref.		Mouth of Riv. Oita (Oita City)	2.4
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	0.9
Kagoshima Pref.		Riv. Amori (Kirishima City)	1.8
Okinarya Deaf	60	Riv. Gotanda (Ichikikushikino City)	1.3
Okinawa Pref.	61	Naha Port	610

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

Detection frequency (sample) is based on the number of samples, 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: 2019

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

	Aggregated value
Geometric mean	3.2
Median	4.5
Maximum	460
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	0.7
	2	Tomakomai Port	6.0
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	1.7
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(0.2)
Akita Pref.	6	Lake Hachiro	3.4
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	1.5
Fukushima Pref.	8	Onahama Port	18
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1.2
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.2)
Chiba Pref.	_	Coast of Ichihara and Anegasaki	11
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(0.3)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	29
		Mouth of Riv. Sumida (Minato Ward)	150
Yokohama City		Yokohama Port	69
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	180
N" - D C		Keihin Canal, Port of Kawasaki	200
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	0.6
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	6.2
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd +=(0,2)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(0.2)
Nagano Pref.	_	Lake Suwa (center)	4.5
Shizuoka Pref.	24	Shimizu Port Volcatayla hashi Bridge Riy, Tanggy (Iyyata City)	6.1
Aichi Pref.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port	tr(0.2)
Alcili Piel.		Nagova Port	6.9
Mie Pref.		Yokkaichi Port	42
WHE FIEL.		Toba Port	3.5
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	8.5
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	25
Kyoto Pref.	_	Miyazu Port	0.9
Kyoto City	_	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	4.5
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	16
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	460
osana ong		Mouth of Riv. Yodo (Osaka City)	39
		Osaka Port	65
	38	Outside Osaka Port	46
Hyogo Pref.	39	Offshore of Himeji	6.1
Kobe City		Kobe Port (center)	85
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(0.3)
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	8.5
Okayama Pref.	43	Offshore of Mizushima	0.5
Hiroshima Pref.	44	Kure Port	27
	45	Hiroshima Bay	6.1
Yamaguchi Pref.	46	Tokuyama Bay	0.7
	47	Offshore of Ube	2.4
	48	Offshore of Hagi	tr(0.4)
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(0.2)
Kagawa Pref.	50		33
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(0.2)
Kitakyushu City	53	Dokai Bay	370
Fukuoka City		Hakata Bay	5.2
Saga Pref.	55	,	3.7
Nagasaki Pref.	_	Omura Bay	3.7
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	31

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

Detection frequency (sample) is based on the number of samples, 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

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	190
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)	42
	2	Tomakomai Port	220
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	5.0
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	190
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	7.0
Akita Pref.	6	Lake Hachiro	230
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	91
Fukushima Pref.	8	Onahama Port	760
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	130
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	11
Chiba Pref.	_	Coast of Ichihara and Anegasaki	1,300
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	13
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	1,900
V 1 1 C'		Mouth of Riv. Sumida (Minato Ward)	9,800
Yokohama City	_	Yokohama Port	4,200
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	6,000
Niigata Brof	_		13,000
Niigata Pref. Tovama Pref.		Lower Riv. Shinano (Niigata City) Hagiyra bashi Bridga Mouth of Riv. Lintsu (Toyama City)	6.6
Ishikawa Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City)	38
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	3.7
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	7.6
Nagano Pref.		Lake Suwa (center)	300
Shizuoka Pref.		Shimizu Port	340
Silizuoka 1 lei.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	8.2
Aichi Pref.		Kinuura Port	740
Auciii I Ici.		Nagoya Port	550
Mie Pref.		Yokkaichi Port	2,600
1,110 1101.		Toba Port	280
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	480
<i>S. S. S.</i>		Lake Biwa (center, offshore of Karasaki)	1,200
Kyoto Pref.	_	Miyazu Port	64
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	280
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	670
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	19,000
	36	Mouth of Riv. Yodo (Osaka City)	3,000
		Osaka Port	3,200
	_	Outside Osaka Port	2,200
Hyogo Pref.		Offshore of Himeji	530
Kobe City		Kobe Port (center)	6,600
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	15
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	350
Okayama Pref.	_	Offshore of Mizushima	54
Hiroshima Pref.	_	Kure Port	2,500
V 11 B 2	45	Hiroshima Bay	640
Yamaguchi Pref.	46	a my m m	100
			160
Tolouchime Df	48	Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	28
Tokushima Pref. Kagawa Pref.		Takamatsu Port	10
Ehime Pref.	_	Niihama Port	1,400 5.8
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	12
Kitakyushu City	53	Dokai Bay	11,000
Fukuoka City		Hakata Bay	380
Saga Pref.		Imari Bay	210
Nagasaki Pref.		Omura Bay	300
Oita Pref.		Mouth of Riv. Oita (Oita City)	5.1
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	1.8
Kagoshima Pref.	_	Riv. Amori (Kirishima City)	3.7
114505111114 1 101.		Riv. Gotanda (Ichikikushikino City)	2.3
Okinawa Pref.	61	Naha Port	2,000
	<u> </u>		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.

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	3.4
Median	4.4
Maximum	360
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	0.7
Tromando	2	Tomakomai Port	3.9
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	2.7
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	2.8
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	1.9
Fukushima Pref.	8	Onahama Port	15
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1.6
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.3)
Chiba Pref.		Coast of Ichihara and Anegasaki	17
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(0.3)
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	28
		Mouth of Riv. Sumida (Minato Ward)	140
Yokohama City		Yokohama Port	75
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	110
		Keihin Canal, Port of Kawasaki	190
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	0.8
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	5.9
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	4.9
Shizuoka Pref.		Shimizu Port	7.1
Aichi Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Prei.		Kinuura Port	6.5
Mie Pref.		Nagoya Port Yokkaichi Port	9.1
whe Fiel.		Toba Port	3.4
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	8.4
Siliga Fiel.		Lake Biwa (center, offshore of Karasaki)	23
Kyoto Pref.		Miyazu Port	1.4
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	4.4
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	14
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	360
Osaka City		Mouth of Riv. Yodo (Osaka City)	47
		Osaka Port	64
		Outside Osaka Port	47
Hyogo Pref.		Offshore of Himeji	7.6
Kobe City	40	Kobe Port (center)	87
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(0.4)
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	6.5
Okayama Pref.		Offshore of Mizushima	0.8
Hiroshima Pref.	44	Kure Port	40
	45	Hiroshima Bay	10
Yamaguchi Pref.	46		1.4
	47		2.9
	48		0.7
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(0.2)
Kagawa Pref.		Takamatsu Port	26
Ehime Pref.		Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(0.3)
Kitakyushu City	53	Dokai Bay	270
Fukuoka City		Hakata Bay	6.7
Saga Pref.		Imari Bay	4.3
Nagasaki Pref.		Omura Bay	5.3
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
Oldings D. C	60	Riv. Gotanda (Ichikikushikino City)	nd 25
Okinawa Pref.	61	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) tr: Detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

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

Monitored year: 2019

Detection Frequency (site): 47/61 (Missing value: 0) Detection Frequency (sample): 47/61 (Missing value: 0)

	Aggregated value
Geometric mean	2.2
Median	3.5
Maximum	80
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	0.5
	2	Tomakomai Port	5.4
Iwate Pref.	3	Toyosawa Bridge, 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	2.2
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	0.9
Fukushima Pref.	8	Onahama Port	14
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.8
Tochigi Pref.	+	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	13
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(0.4)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	20
		Mouth of Riv. Sumida (Minato Ward)	53
Yokohama City		Yokohama Port	23
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	7.9
N" - D C		Keihin Canal, Port of Kawasaki	40
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	0.8
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	2.9
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	_	Lake Suwa (center)	6.1
Shizuoka Pref.	24	Shimizu Port Volcatoulos heaki Bridge Birr Tengra (Irrete City)	3.7
Aichi Pref.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port	nd 4.8
Alcili Piel.		Nagova Port	5.8
Mie Pref.		Yokkaichi Port	12
WHE FIEL.		Toba Port	3.0
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	17
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	17
Kyoto Pref.	_	Miyazu Port	0.9
Kyoto City	_	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1.1
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	14
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	80
osana ong		Mouth of Riv. Yodo (Osaka City)	15
		Osaka Port	17
	38	Outside Osaka Port	16
Hyogo Pref.	39	Offshore of Himeji	6.7
Kobe City	40	Kobe Port (center)	27
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	4.0
Okayama Pref.	43	Offshore of Mizushima	0.8
Hiroshima Pref.	44	Kure Port	15
	45	Hiroshima Bay	6.8
Yamaguchi Pref.	46		7.5
	47	Offshore of Ube	4.7
	48	Offshore of Hagi	0.5
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	10
Ehime Pref.		Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(0.3)
Kitakyushu City	53	Dokai Bay	52
Fukuoka City		Hakata Bay	3.5
Saga Pref.	55	,	2.7
Nagasaki Pref.	_	Omura Bay	3.1
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	13

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

Detection frequency (sample) is based on the number of samples, 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] Hexachlorobiphenyls/sediment (pg/g-dry)

Monitored year: 2019

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

	Aggregated value
Geometric mean	900
Median	1,300
Maximum	83,000
Minimum	3.7

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	150
	2	Tomakomai Port	1,300
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	13
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	860
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	49
Akita Pref.	6	Lake Hachiro	820
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	430
Fukushima Pref.	8	Onahama Port	3,200
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	430
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	50
Chiba Pref.		Coast of Ichihara and Anegasaki	5,700
Chiba City		Mouth of Riv. Hanami (Chiba City)	48
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward)	5,700 24,000
Yokohama City	_	Yokohama Port	24,000
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	23,000
Kawasaki City		Keihin Canal, Port of Kawasaki	50,000
Niigata Pref.		Lower Riv. Shinano (Niigata City)	21
Tovama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	140
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	920
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	9.6
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Shoho (Tsutuga City)	38
Nagano Pref.	_	Lake Suwa (center)	1,600
Shizuoka Pref.		Shimizu Port	1,500
Silizuoka 1 ici.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	23
Aichi Pref.		Kinuura Port	3,300
111011111111		Nagoya Port	2,200
Mie Pref.		Yokkaichi Port	9,600
		Toba Port	8,500
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	1,900
<i>G</i>		Lake Biwa (center, offshore of Karasaki)	4,600
Kyoto Pref.		Miyazu Port	410
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	750
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	3,200
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	76,000
	36	Mouth of Riv. Yodo (Osaka City)	21,000
		Osaka Port	14,000
	38	Outside Osaka Port	10,000
Hyogo Pref.		Offshore of Himeji	2,600
Kobe City		Kobe Port (center)	83,000
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	84
Wakayama Pref.	_	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,300
Okayama Pref.		Offshore of Mizushima	700
Hiroshima Pref.	_	Kure Port	32,000
***	45	Hiroshima Bay	5,300
Yamaguchi Pref.	46	i aya a ay	1,200
	47		980
m 1 1' p °	48	Offshore of Hagi	240
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	38
Kagawa Pref.		Takamatsu Port	4,600
Ehime Pref. Kochi Pref.	51 52	Niihama Port Mouth of Riv. Shimanto (Shimanto City)	33 57
Kitakyushu City	53	Dokai Bay	24,000
Fukuoka City		Hakata Bay	1,200
Saga Pref.		Imari Bay	1,600
Nagasaki Pref.		Omura Bay	1,900
Oita Pref.		Mouth of Riv. Oita (Oita City)	1,900
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	3.7
Kagoshima Pref.		Riv. Amori (Kirishima City)	11
rugosiiina i iti.	60	Riv. Gotanda (Ichikikushikino City)	11
Okinawa Pref.	61	Naha Port	36,000
Okinawa 1101.	01	1 mm 1 V11	30,000

⁽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.

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	22
Median	27
Maximum	2,000
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	4.5
	2	Tomakomai Port	23
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(0.5)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	15
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(0.9)
Akita Pref.	6	Lake Hachiro	25
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	11
Fukushima Pref.	8	Onahama Port	87
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	8.4
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	1.1
Chiba Pref.	11		93
Chiba City Tokyo Met.		Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward)	1.6 140
Tokyo Met.	14	`	630
Yokohama City		Yokohama Port	550
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	910
Trawasaki City	17	•	1,400
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(0.7)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	4.1
Ishikawa Pref.	20		25
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(1.0)
Nagano Pref.	23	Lake Suwa (center)	43
Shizuoka Pref.		Shimizu Port	35
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(0.9)
Aichi Pref.	26	Kinuura Port	49
	27	Nagoya Port	43
Mie Pref.		Yokkaichi Port	240
G1: D 0		Toba Port	120
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	60
Kyoto Pref.	32	Lake Biwa (center, offshore of Karasaki) Miyazu Port	190
Kyoto Pier. Kyoto City	33	J.	8.5 24
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	100
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	2,000
Osaka City		Mouth of Riv. Yodo (Osaka City)	430
		Osaka Port	410
		Outside Osaka Port	350
Hyogo Pref.	39		59
Kobe City	40	Kobe Port (center)	1,200
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	2.6
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	44
Okayama Pref.	43	Offshore of Mizushima	7.9
Hiroshima Pref.	44	Kure Port	390
	45	Hiroshima Bay	71
Yamaguchi Pref.		Tokuyama Bay	12
	47		13
	48		4.0
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(1.0)
Kagawa Pref.		Takamatsu Port	140
Ehime Pref.	51		tr(0.6)
Kochi Pref. Kitakyushu City	52	Mouth of Riv. Shimanto (Shimanto City) Dokai Bay	1.6 670
Fukuoka City	53 54	·	27
Saga Pref.	55		30
Nagasaki Pref.		Omura Bay	37
Oita Pref.	57	j	tr(0.7)
Miyazaki Pref.	58	Mouth of Riv. Orda (Orda City) Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59		tr(0.4)
-14800	60	Riv. Gotanda (Ichikikushikino City)	tr(0.5)
Okinawa Pref.	61	Naha Port	490
	·	!	

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

Detection frequency (sample) is based on the number of samples, 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: 2019

Detection Frequency (site): 49/61 (Missing value: 0)
Detection Frequency (sample): 49/61 (Missing value: 0)

	Aggregated value
Geometric mean	5.5
Median	6.1
Maximum	490
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.1
Trommardo	2	Tomakomai Port	3.8
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	4.0
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	5.4
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	3.6
Fukushima Pref.	8	Onahama Port	18
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2.4
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.5)
Chiba Pref.	11	Coast of Ichihara and Anegasaki	27
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(0.4)
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	34
			150
Yokohama City		Yokohama Port	120
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	170
		,	270
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1.2
Ishikawa Pref.	20		6.2
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	9.3
Shizuoka Pref.		Shimizu Port	6.1
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	11
) (i D 0	27	Nagoya Port	9.8
Mie Pref.		Yokkaichi Port	53
CI. D. C		Toba Port	16
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	13
Vt- Du-f		Lake Biwa (center, offshore of Karasaki)	37
Kyoto Pref.	32	J.	2.0
Kyoto City	33	Mouth of Riv. Yamato (Sakai City)	6.1
Osaka Pref. Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	490
Osaka City		Mouth of Riv. Yodo (Osaka City)	87
		Osaka Port	94
	38		80
Hyogo Pref.	39		14
Kobe City		Kobe Port (center)	280
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	tr(0.7)
Wakayama Pref.			9.9
Okayama Pref.		Offshore of Mizushima	1.3
Hiroshima Pref.		Kure Port	110
	45	Hiroshima Bay	17
Yamaguchi Pref.		Tokuyama Bay	2.4
	47		2.6
	48		tr(0.9)
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	32
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(0.4)
Kitakyushu City	53	Dokai Bay	130
Fukuoka City	54	Hakata Bay	6.0
Saga Pref.	55		16
Nagasaki Pref.	56	Omura Bay	8.2
Oita Pref.	57	\ 7/	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	\ 1/	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	140

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

Detection frequency (sample) is based on the number of samples, 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: 2019

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

	Aggregated value
Geometric mean	9.8
Median	14
Maximum	770
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.7
Tromando	2	Tomakomai Port	9.6
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	8.4
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(0.4)
Akita Pref.	6	Lake Hachiro	9.5
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	4.9
Fukushima Pref.	8	Onahama Port	33
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	3.9
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.6)
Chiba Pref.		Coast of Ichihara and Anegasaki	53
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(0.7)
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	57
	_	Mouth of Riv. Sumida (Minato Ward)	250
Yokohama City		Yokohama Port	280
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	330
		Keihin Canal, Port of Kawasaki	600
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1.8
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	9.4
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	_	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(0.5)
Nagano Pref.		Lake Suwa (center)	16
Shizuoka Pref.		Shimizu Port Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	14
Aichi Pref.		Kinuura Port	tr(0.4)
Alcili Piei.		Nagoya Port	19
Mie Pref.		Yokkaichi Port	95
when then.		Toba Port	67
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	23
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	61
Kyoto Pref.		Miyazu Port	4.1
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	8.7
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	40
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	770
		Mouth of Riv. Yodo (Osaka City)	200
		Osaka Port	170
	38	Outside Osaka Port	140
Hyogo Pref.	39	Offshore of Himeji	27
Kobe City	40	Kobe Port (center)	670
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	1.1
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	17
Okayama Pref.		Offshore of Mizushima	5.1
Hiroshima Pref.	_	Kure Port	230
	45	Hiroshima Bay	43
Yamaguchi Pref.	46	a my m m	8.0
	47		7.2
	48	Offshore of Hagi	2.1
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(0.5)
Kagawa Pref.		Takamatsu Port	57
Ehime Pref.	_	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(0.8)
Kitakyushu City	53	Dokai Bay	300
Fukuoka City		Hakata Bay	14
Saga Pref.		Imari Bay Omura Bay	15
Nagasaki Pref.		ý.	18
Oita Pref. Miyazaki Pref.		Mouth of Riv. Oita (Oita City) Mouth of Riv. Ovede (Miyazaki City)	nd nd
Kagoshima Pref.		Mouth of Riv. Oyodo (Miyazaki City) Riv. Amori (Kirishima City)	nd
Kagosiiima Prei.	60	Riv. Amori (Kirisnima City) Riv. Gotanda (Ichikikushikino City)	nd nd
Okinawa Pref.	61	Naha Port	260
Okinawa Fici.	UΙ	Ivana i Oit	200

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

Detection frequency (sample) is based on the number of samples, 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

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	2.0
Median	2.3
Maximum	180
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
	2	Tomakomai Port	1.7
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	1.4
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	4.0
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(0.6)
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	7.2
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	5.3
		Mouth of Riv. Sumida (Minato Ward)	18
Yokohama City		Yokohama Port	57
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	7.6
		Keihin Canal, Port of Kawasaki	29
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.4)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(0.9)
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	3.6
Shizuoka Pref.	24	Shimizu Port	2.1
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	3.7
11. D. C		Nagoya Port	2.0
Mie Pref.		Yokkaichi Port	5.9
CI. D. C		Toba Port	26
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	4.5
Kyoto Pref.		Lake Biwa (center, offshore of Karasaki) Miyazu Port	3.5 tr(0.7)
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	5.7
Osaka Fier. Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	78
Osaka City		Mouth of Riv. Yodo (Osaka City)	32
		Osaka Port	8.5
	38	Outside Osaka Port	7.5
Hyogo Pref.		Offshore of Himeji	2.8
Kobe City		Kobe Port (center)	180
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	2.3
Okayama Pref.	43	Offshore of Mizushima	4.7
Hiroshima Pref.		Kure Port	78
Tin osinina Tier.	45	Hiroshima Bay	13
Yamaguchi Pref.	46	†	6.1
	47	Offshore of Ube	2.6
		Offshore of Hagi	1.1
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50		4.4
Ehime Pref.		Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	170
Fukuoka City		Hakata Bay	1.7
Saga Pref.	55		3.9
Nagasaki Pref.		Omura Bay	4.6
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
		Riv. Gotanda (Ichikikushikino City)	nd
l e e e e e e e e e e e e e e e e e e e	60	Kiv. Gotanda (Ichikikushikino 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) tr: Detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	310
Median	560
Maximum	79,000
Minimum	tr(0.4)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	35
	2	Tomakomai Port	880
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	1.6
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	380
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	21
Akita Pref.	6	Lake Hachiro	160
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	55
Fukushima Pref.	8	Onahama Port	1,600
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	100
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	11
Chiba Pref.		Coast of Ichihara and Anegasaki	2,500
Chiba City Tokyo Met.		Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward)	15 1,500
Tokyo Met.		Mouth of Riv. Sumida (Minato Ward)	6,000
Yokohama City		Yokohama Port	16,000
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	4,000
Kawasaki City		Keihin Canal, Port of Kawasaki	22,000
Niigata Pref.		Lower Riv. Shinano (Niigata City)	4.3
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	45
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	280
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.5
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	6.3
Nagano Pref.		Lake Suwa (center)	540
Shizuoka Pref.	24	Shimizu Port	860
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	3.3
Aichi Pref.		Kinuura Port	1,400
	27	Nagoya Port	860
Mie Pref.	28	Yokkaichi Port	3,100
	29	Toba Port	11,000
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	480
		Lake Biwa (center, offshore of Karasaki)	730
Kyoto Pref.		Miyazu Port	210
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	100
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	1,200
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	31,000
		Mouth of Riv. Yodo (Osaka City)	13,000
		Osaka Port Outside Osaka Port	3,200
Hyogo Pref.		Offshore of Himeji	2,500 890
Kobe City		Kobe Port (center)	79,000
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	21
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	370
Okayama Pref.		Offshore of Mizushima	680
Hiroshima Pref.		Kure Port	24,000
	45	Hiroshima Bay	2,600
Yamaguchi Pref.	46	·	950
	47		560
	48	Offshore of Hagi	180
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	11
Kagawa Pref.	50	Takamatsu Port	1,400
Ehime Pref.	51	Niihama Port	16
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	26
Kitakyushu City	53	Dokai Bay	27,000
Fukuoka City		Hakata Bay	460
Saga Pref.		Imari Bay	1,100
Nagasaki Pref.		Omura Bay	950
Oita Pref.		Mouth of Riv. Oita (Oita City)	6.6
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	tr(0.4)
Kagoshima Pref.		Riv. Amori (Kirishima City)	1.9 2.5
Okinawa Df	60	Riv. Gotanda (Ichikikushikino City)	
Okinawa Pref.	61	Naha Port	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) tr: Detection limit value and more, less than Quantification limit value.

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

Monitored year: 2019

Detection Frequency (site): 60/61 (Missing value: 0)
Detection Frequency (sample): 60/61 (Missing value: 0)

	Aggregated value
Geometric mean	41
Median	69
Maximum	7,500
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	4.7
	2	Tomakomai Port	85
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(0.4)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	38
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	1.8
Akita Pref.	6	Lake Hachiro	23
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	8.7
Fukushima Pref.	8	Onahama Port	170
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	13
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	1.6
Chiba Pref.	11	Coast of Ichihara and Anegasaki	270
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	2.2
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	190
	14	Mouth of Riv. Sumida (Minato Ward)	840
Yokohama City		Yokohama Port	1,700
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	710
	17	Keihin Canal, Port of Kawasaki	2,300
Niigata Pref.		Lower Riv. Shinano (Niigata City)	0.8
Toyama Pref.	19	Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	6.0
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	31
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.4)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	0.9
Nagano Pref.	23	Lake Suwa (center)	72
Shizuoka Pref.	24	Shimizu Port	97
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	0.8
Aichi Pref.	26	Kinuura Port	130
	27	Nagoya Port	93
Mie Pref.	28	Yokkaichi Port	360
	29	Toba Port	1,100
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	69
•	31	Lake Biwa (center, offshore of Karasaki)	130
Kyoto Pref.	32	Miyazu Port	20
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	16
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	150
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	3,700
	36	Mouth of Riv. Yodo (Osaka City)	1,400
	37	Osaka Port	460
	38	Outside Osaka Port	360
Hyogo Pref.	39	Offshore of Himeji	93
Kobe City	40	Kobe Port (center)	7,500
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	3.2
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	53
Okayama Pref.	43	Offshore of Mizushima	65
Hiroshima Pref.	44	Kure Port	2,400
	45	Hiroshima Bay	230
Yamaguchi Pref.	46		82
	47	Offshore of Ube	56
		Offshore of Hagi	19
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	1.4
Kagawa Pref.	50	Takamatsu Port	200
Ehime Pref.	_	Niihama Port	1.5
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	3.0
Kitakyushu City	53	Dokai Bay	3,100
Fukuoka City		Hakata Bay	50
Saga Pref.	55		110
Nagasaki Pref.	_	Omura Bay	100
Oita Pref.	_	Mouth of Riv. Oita (Oita City)	1.1
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	tr(0.5)
ragosiniia i ici.	60	Riv. Gotanda (Ichikikushikino City)	tr(0.6)
Okinawa Pref.	61	Naha Port	3,100
Okmawa 1 IUI.	UI	I tuliu I OI	5,100

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

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.

⁽Note 4) nd : Not detected

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	94
Median	150
Maximum	23,000
Minimum	tr(0.4)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	9.9
	2	Tomakomai Port	250
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	0.8
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	99
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	6.5
Akita Pref.	6	Lake Hachiro	45
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	16
Fukushima Pref.	8	Onahama Port	450
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	27
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	2.9
Chiba Pref.	_	Coast of Ichihara and Anegasaki	630
Chiba City Tokyo Met.	_	Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward)	4.5
Tokyo Met.		Mouth of Riv. Sumida (Minato Ward)	1,800
Yokohama City		Yokohama Port	4,500
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	1,100
Kawasaki City		Keihin Canal, Port of Kawasaki	6,100
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	1.7
Tovama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	13
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	76
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.7)
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Shoho (Tsutuga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	1.9
Nagano Pref.		Lake Suwa (center)	140
Shizuoka Pref.		Shimizu Port	260
Sinzaoka i ici.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	1.5
Aichi Pref.		Kinuura Port	340
111011111111		Nagoya Port	240
Mie Pref.		Yokkaichi Port	880
	29	Toba Port	3,300
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	130
C	31	Lake Biwa (center, offshore of Karasaki)	190
Kyoto Pref.	32	Miyazu Port	47
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	28
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	330
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	9,200
	36	Mouth of Riv. Yodo (Osaka City)	4,100
		Osaka Port	840
	_	Outside Osaka Port	660
Hyogo Pref.		Offshore of Himeji	210
Kobe City		Kobe Port (center)	23,000
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	6.2
Wakayama Pref.	_	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	120
Okayama Pref.		Offshore of Mizushima	200
Hiroshima Pref.		Kure Port	7,600
11 1:D C	45	Hiroshima Bay	560
Yamaguchi Pref.	46	i aya a ay	230
	47		150
Tokushima Pref.	48		50
Kagawa Pref.	49	Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port	3.3
Ehime Pref.	51	Niihama Port	420 3.5
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	8.1
Kitakyushu City	53	Dokai Bay	9,700
Fukuoka City		Hakata Bay	130
Saga Pref.		Imari Bay	340
Nagasaki Pref.		Omura Bay	250
Oita Pref.		Mouth of Riv. Oita (Oita City)	2.3
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	tr(0.4)
Kagoshima Pref.	_	Riv. Amori (Kirishima City)	1.0
	60	Riv. Gotanda (Ichikikushikino City)	1.2
Okinawa Pref.	61	Naha Port	8,700
	·	!	~,. ~ ~

⁽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.

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	2.5
Median	2.5
Maximum	220
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(0.4)
Tromando	2	Tomakomai Port	2.5
Iwate Pref.	3	Toyosawa Bridge, 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	1.7
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	6.7
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1.0
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	9.8
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	9.2
		Mouth of Riv. Sumida (Minato Ward)	39
Yokohama City	_	Yokohama Port	75
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	32
	_	Keihin Canal, Port of Kawasaki	87
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(0.4)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1.5
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	3.8
Shizuoka Pref.		Shimizu Port	3.7
A: 1: D. C		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	5.5
Mi- Df		Nagoya Port	4.0
Mie Pref.		Yokkaichi Port Toba Port	34
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	5.8
Siliga Fiel.		Lake Biwa (center, offshore of Karasaki)	8.0
Kyoto Pref.	_	Miyazu Port	1.3
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1.0
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	7.2
Osaka City	_	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	140
Osaka City		Mouth of Riv. Yodo (Osaka City)	55
		Osaka Port	22
		Outside Osaka Port	17
Hyogo Pref.	_	Offshore of Himeji	5.2
Kobe City		Kobe Port (center)	220
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	2.2
Okayama Pref.		Offshore of Mizushima	1.9
Hiroshima Pref.	44	Kure Port	85
	45	Hiroshima Bay	8.6
Yamaguchi Pref.	46	a my m m my	3.1
	47		2.0
	48	Offshore of Hagi	tr(0.7)
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	_	Takamatsu Port	8.3
Ehime Pref.		Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	150
Fukuoka City		Hakata Bay	2.3
Saga Pref.		Imari Bay	5.0
Nagasaki Pref.		Omura Bay	4.3
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
Olrinor Df		Riv. Gotanda (Ichikikushikino City)	nd 100
Okinawa Pref.	61	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.

⁽Note 4) nd: Not detected

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

Monitored year: 2019

Detection Frequency (site): 54/61 (Missing value: 0)
Detection Frequency (sample): 54/61 (Missing value: 0)

	Aggregated value
Geometric mean	53
Median	100
Maximum	18,000
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	5.3
	2	Tomakomai Port	180
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	83
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	2.2
Akita Pref.	6	Lake Hachiro	25
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	5.6
Fukushima Pref.	8	Onahama Port	350
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	22
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.9)
Chiba Pref.		Coast of Ichihara and Anegasaki	470
Chiba City		Mouth of Riv. Hanami (Chiba City)	1.8
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	220
		Mouth of Riv. Sumida (Minato Ward)	1,100
Yokohama City		Yokohama Port	3,600
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	270
		Keihin Canal, Port of Kawasaki	6,400
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(0.4)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	7.9
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	42
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	_	Lake Suwa (center)	91
Shizuoka Pref.	24	Shimizu Port	190
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	250
16: D 6	_	Nagoya Port	160
Mie Pref.		Yokkaichi Port	640
G1: D 0		Toba Port	3,000
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	110
IZ A D C		Lake Biwa (center, offshore of Karasaki)	90
Kyoto Pref.		Miyazu Port	50
Kyoto City Osaka Pref.		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	
		Mouth of Riv. Yamato (Sakai City)	230 6,200
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) Mouth of Riv. Yodo (Osaka City)	3,700
		Osaka Port	490
	38	Outside Osaka Port	370
Hyogo Pref.		Offshore of Himeji	180
Kobe City		Kobe Port (center)	18,000
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	2.7
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	60
Okayama Pref.	43	Offshore of Mizushima	180
Hiroshima Pref.		Kure Port	6,400
Tinosimia Tier.	45	Hiroshima Bay	580
Yamaguchi Pref.	46		260
I umagacini i ici.	47	Offshore of Ube	100
		Offshore of Hagi	52
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(0.9)
Kagawa Pref.	50	Takamatsu Port	220
Ehime Pref.		Niihama Port	3.8
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	3.9
Kitakyushu City	53	Dokai Bay	15,000
Fukuoka City		Hakata Bay	77
Saga Pref.	55	-	250
Nagasaki Pref.		Omura Bay	260
Oita Pref.		Mouth of Riv. Oita (Oita City)	tr(0.9)
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
ragosinina i ici.	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	5,600
Okinawa 1 ICI.	1 01	1 14H4 1 OIC	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) 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: 2019

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

	Aggregated value
Geometric mean	8.6
Median	14
Maximum	1,500
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.8
	2	Tomakomai Port	11
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	14
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	8.5
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	2.8
Fukushima Pref.	8	Onahama Port	62
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	9.1
Tochigi Pref.	-	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.3)
Chiba Pref.		Coast of Ichihara and Anegasaki	39
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(0.2)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	43
		Mouth of Riv. Sumida (Minato Ward)	170
Yokohama City		Yokohama Port	570
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	24
		Keihin Canal, Port of Kawasaki	1,100
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	2.6
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	6.1
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(0.2)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	_	Lake Suwa (center)	19
Shizuoka Pref.	24	Shimizu Port	14
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	20
	_	Nagoya Port	18
Mie Pref.		Yokkaichi Port	80
G1: D 0		Toba Port	160
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	29
W . D C		Lake Biwa (center, offshore of Karasaki)	20
Kyoto Pref.		Miyazu Port	6.6
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1.1
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	27
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	730
		Mouth of Riv. Yodo (Osaka City)	260
		Osaka Port	49
H Df	38	Outside Osaka Port	48 26
Hyogo Pref.		Offshore of Himeji Kobe Port (center)	
Kobe City Nara Pref.	+	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	1,000
Wakayama Pref.	41	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(0.4)
Okayama Pref.	43	Offshore of Mizushima	13
Hiroshima Pref.		Kure Port	630
rinosiiiiia Fiei.	45	Hiroshima Bay	51
Yamaguchi Pref.	46	i	25
ramaguem Frei.	47	Offshore of Ube	10
		Offshore of Hagi	4.7
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50		32
Ehime Pref.	_	Niihama Port	3.4
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	0.8
Kitakyushu City	53	Dokai Bay	1,500
Fukuoka City		Hakata Bay	10
Saga Pref.	55		21
Nagasaki Pref.		Omura Bay	55
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
ragosinila i ici.	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	440
Okinawa 1 ICI.	1 01	I talia I Oit	++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.

⁽Note 4) nd: Not detected

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

Monitored year: 2019

Detection Frequency (site): 47/61 (Missing value: 0) Detection Frequency (sample): 47/61 (Missing value: 0)

	Aggregated value
Geometric mean	9.8
Median	13
Maximum	7,600
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	2.7
	2	Tomakomai Port	4.5
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	46
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)	3.8
Fukushima Pref.	8	Onahama Port	1,200
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	18
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	_	Coast of Ichihara and Anegasaki	47
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	62
		Mouth of Riv. Sumida (Minato Ward)	220
Yokohama City		Yokohama Port	7,600
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	12
N" - D C		Keihin Canal, Port of Kawasaki	530
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	3.3
Ishikawa Pref.	+	Mouth of Riv. Sai (Kanazawa City)	4.8
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.	_	Lake Suwa (center)	18 7.9
Shizuoka Pref.	24	Shimizu Port Volcatayla hashi Bridge Riy, Tanggu (Iyyata City)	
Aichi Pref.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port	nd
Alcili Piel.		Nagova Port	6.5 9.5
Mie Pref.		Yokkaichi Port	32
Mile Fiel.		Toba Port	5.2
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	31
Siliga I Ici.		Lake Biwa (center, offshore of Karasaki)	16
Kyoto Pref.		Miyazu Port	6.3
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(0.8)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	16
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	220
osana ong		Mouth of Riv. Yodo (Osaka City)	91
		Osaka Port	27
	38	Outside Osaka Port	28
Hyogo Pref.	39	Offshore of Himeji	13
Kobe City		Kobe Port (center)	96
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	16
Okayama Pref.	43	Offshore of Mizushima	4.4
Hiroshima Pref.	44	Kure Port	520
	45	Hiroshima Bay	81
Yamaguchi Pref.	46	Tokuyama Bay	180
	47	Offshore of Ube	14
	48	Offshore of Hagi	1.9
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	35
Ehime Pref.		Niihama Port	14
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(0.8)
Kitakyushu City	53	Dokai Bay	1,500
Fukuoka City		Hakata Bay	12
Saga Pref.	55	,	14
Nagasaki Pref.		Omura Bay	74
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	160

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

Detection frequency (sample) is based on the number of samples, 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] HCB (Hexachlorobenzene) /sediment (pg/g-dry)

Monitored year: 2019

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

	Aggregated value
Geometric mean	88
Median	85
Maximum	10,000
Minimum	4.5

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	150
	2	Tomakomai Port	120
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	9.1
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	760
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	19
Akita Pref.	6	Lake Hachiro	91
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	110
Fukushima Pref.	8	Onahama Port	10,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	840
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	6.1
Chiba Pref.		Coast of Ichihara and Anegasaki	240
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	4.5
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	2,100
	_	Mouth of Riv. Sumida (Minato Ward)	1,200
Yokohama City		Yokohama Port	600
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	250
		Keihin Canal, Port of Kawasaki	2,000
Niigata Pref.		Lower Riv. Shinano (Niigata City)	15
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	85
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	110
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	5.3
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	9.2
Nagano Pref.		Lake Suwa (center)	740
Shizuoka Pref.		Shimizu Port	71
Aichi Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	31
Aichi Pref.		Kinuura Port	54
Mir Durf		Nagoya Port	57 430
Mie Pref.		Yokkaichi Port Toba Port	
Chica Duaf		Lake Biwa (center, offshore of Minamihira)	67 200
Shiga Pref.		Lake Biwa (center, offshore of Karasaki)	56
Kyoto Pref.		Miyazu Port	35
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	27
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	200
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	1,000
Osaka City		Mouth of Riv. Yodo (Osaka City)	230
		Osaka Port	290
		Outside Osaka Port	210
Hyogo Pref.		Offshore of Himeji	61
Kobe City		Kobe Port (center)	180
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	8.7
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	220
Okayama Pref.		Offshore of Mizushima	29
Hiroshima Pref.	44	Kure Port	130
	45	Hiroshima Bay	55
Yamaguchi Pref.	46	Tokuyama Bay	210
-	47		50
	48	Offshore of Hagi	14
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	17
Kagawa Pref.		Takamatsu Port	130
Ehime Pref.	51	Niihama Port	150
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	34
Kitakyushu City	53	Dokai Bay	4,700
Fukuoka City		Hakata Bay	39
Saga Pref.		Imari Bay	61
Nagasaki Pref.		Omura Bay	42
Oita Pref.		Mouth of Riv. Oita (Oita City)	7.9
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	9.8
Kagoshima Pref.		Riv. Amori (Kirishima City)	8.9
		Riv. Gotanda (Ichikikushikino City)	6.9
Okinawa Pref.	61	Naha Port	99

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

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

[11] HCHs/sediment (pg/g-dry)

Monitored year: 2019

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

	Aggregated value
Geometric mean	260
Median	250
Maximum	10,000
Minimum	6.6

Local communities	No.	Monitored sites	Measured valu
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1,200
	2	Tomakomai Port	150
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	20
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	190
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	19
Akita Pref.	6	Lake Hachiro	930
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	210
Fukushima Pref.	8	Onahama Port	1,600
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	150
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	15
Chiba Pref.	11	Coast of Ichihara and Anegasaki	200
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	7.2
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	620
·	14	Mouth of Riv. Sumida (Minato Ward)	1,600
Yokohama City	15		520
Kawasaki City	16	Mouth of Riv. Tama (Kawasaki City)	160
		Keihin Canal, Port of Kawasaki	740
Niigata Pref.		Lower Riv. Shinano (Niigata City)	58
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	120
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	150
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	16
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	53
Nagano Pref.		Lake Suwa (center)	660
Shizuoka Pref.	24	Shimizu Port	150
	_	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	36
Aichi Pref.		Kinuura Port	710
	_	Nagoya Port	290
Mie Pref.	28	Yokkaichi Port	1,200
	-	Toba Port	180
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	3,900
		Lake Biwa (center, offshore of Karasaki)	700
Kyoto Pref.		Miyazu Port	200
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	45
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	1,500
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	4,500
	36	Mouth of Riv. Yodo (Osaka City)	1,900
	37	Osaka Port	2,600
	38	Outside Osaka Port	4,500
Hyogo Pref.	39	Offshore of Himeji	690
Kobe City	40	Kobe Port (center)	1,600
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	25
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	620
Okayama Pref.	43	Offshore of Mizushima	91
Hiroshima Pref.	44	Kure Port	1,200
		Hiroshima Bay	630
Yamaguchi Pref.	46	Tokuyama Bay	250
	47	Offshore of Ube	620
			65
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	67
Kagawa Pref.	50	Takamatsu Port	1,100
Ehime Pref.		Niihama Port	7.3
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	130
Kitakyushu City		Dokai Bay	10,000
Fukuoka City		Hakata Bay	710
Saga Pref.	-	Imari Bay	1,200
Nagasaki Pref.	-	Omura Bay	780
Oita Pref.		Mouth of Riv. Oita (Oita City)	6.6
Miyazaki Pref.	-	Mouth of Riv. Oyodo (Miyazaki City)	460
Kagoshima Pref.		Riv. Amori (Kirishima City)	17
	60	Riv. Gotanda (Ichikikushikino City)	40
Okinawa Pref.	61	Naha Port	210

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

Detection frequency (sample) is based on the number of samples, 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 isomers.

[11-1] α -HCH/sediment (pg/g-dry)

Monitored year: 2019

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

	Aggregated value
Geometric mean	67
Median	83
Maximum	2,600
Minimum	1.3

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	340
	2	Tomakomai Port	56
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	8.5
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	56
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	2.0
Akita Pref.	6	Lake Hachiro	110
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	55
Fukushima Pref.	8	Onahama Port	530
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	56
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	2.8
Chiba Pref.		Coast of Ichihara and Anegasaki	72
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	1.8
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	200
		Mouth of Riv. Sumida (Minato Ward)	520
Yokohama City	_	Yokohama Port	220
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	43
	_	Keihin Canal, Port of Kawasaki	280
Niigata Pref.		Lower Riv. Shinano (Niigata City)	11
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	30
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	51
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	4.1
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	6.5
Nagano Pref.		Lake Suwa (center)	170
Shizuoka Pref.		Shimizu Port	52 12
Aichi Pref.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	
Aichi Prei.		Kinuura Port	260
Mie Pref.		Nagoya Port Yokkaichi Port	110 520
whe Fiel.		Toba Port	35
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	240
Siliga i ici.		Lake Biwa (center, offshore of Karasaki)	130
Kyoto Pref.	_	Miyazu Port	69
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	7.8
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	360
Osaka City	_	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	1,700
		Mouth of Riv. Yodo (Osaka City)	800
		Osaka Port	330
		Outside Osaka Port	210
Hyogo Pref.	39	Offshore of Himeji	180
Kobe City	40	Kobe Port (center)	540
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	5.0
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	200
Okayama Pref.	43	Offshore of Mizushima	31
Hiroshima Pref.	44	Kure Port	450
	45	Hiroshima Bay	250
Yamaguchi Pref.	46	i aya a ay	110
	47		210
	48	Offshore of Hagi	22
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	20
Kagawa Pref.	_	Takamatsu Port	300
Ehime Pref.		Niihama Port	1.7
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	41
Kitakyushu City	53	Dokai Bay	2,600
Fukuoka City		Hakata Bay	260
Saga Pref.		Imari Bay	340
Nagasaki Pref.		Omura Bay	260
Oita Pref.		Mouth of Riv. Oita (Oita City)	1.3
Miyazaki Pref.	_	Mouth of Riv. Oyodo (Miyazaki City)	83
Kagoshima Pref.		Riv. Amori (Kirishima City)	3.1
Oldin B. C		Riv. Gotanda (Ichikikushikino City)	7.1
Okinawa Pref.	61	Naha Port	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.

[11-2] β -HCH/sediment (pg/g-dry)

Monitored year: 2019

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

	Aggregated value
Geometric mean	130
Median	110
Maximum	4,100
Minimum	4.0

	No.	Monitored sites	Measured value
Hokkaido		Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	680
	2	Tomakomai Port	59
Iwate Pref.		Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	6.3
Miyagi Pref.		Sendai Bay (Matsushima Bay)	100
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	15
Akita Pref.		Lake Hachiro	680
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	110
Fukushima Pref.	8	Onahama Port	670
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	62
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	9.6
Chiba Pref.	11	Coast of Ichihara and Anegasaki	87
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	4.1
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	260
		Mouth of Riv. Sumida (Minato Ward)	570
Yokohama City		Yokohama Port	180
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	72
	17	Keihin Canal, Port of Kawasaki	300
Niigata Pref.		Lower Riv. Shinano (Niigata City)	35
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	63
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	73
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	8.8
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	37
Nagano Pref.	23	Lake Suwa (center)	390
Shizuoka Pref.	24	Shimizu Port	71
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	17
Aichi Pref.	26	Kinuura Port	270
	27	Nagoya Port	110
Mie Pref.	28	Yokkaichi Port	370
	29	Toba Port	110
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	3,500
_	31	Lake Biwa (center, offshore of Karasaki)	520
Kyoto Pref.	32	Miyazu Port	97
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	28
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	930
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	2,000
	36	Mouth of Riv. Yodo (Osaka City)	560
	50		300
		Osaka Port	2,100
	37	Osaka Port Outside Osaka Port	
Hyogo Pref.	37 38		2,100
Hyogo Pref. Kobe City	37 38 39	Outside Osaka Port	2,100 4,100
Kobe City	37 38 39 40	Outside Osaka Port Offshore of Himeji Kobe Port (center)	2,100 4,100 340
	37 38 39 40 41	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town)	2,100 4,100 340 810
Kobe City Nara Pref. Wakayama Pref.	37 38 39 40 41 42	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	2,100 4,100 340 810 15
Kobe City Nara Pref. Wakayama Pref. Okayama Pref.	37 38 39 40 41 42 43	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima	2,100 4,100 340 810 15 260 46
Kobe City Nara Pref. Wakayama Pref.	37 38 39 40 41 42 43	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port	2,100 4,100 340 810 15 260 46 460
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref.	37 38 39 40 41 42 43 44	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay	2,100 4,100 340 810 15 260 46
Kobe City Nara Pref. Wakayama Pref. Okayama Pref.	37 38 39 40 41 42 43 44 45 46	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay	2,100 4,100 340 810 15 260 46 460 270 98
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref.	37 38 39 40 41 42 43 44 45 46 47	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube	2,100 4,100 340 810 15 260 46 460 270 98 300
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref.	37 38 39 40 41 42 43 44 45 46 47 48	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi	2,100 4,100 340 810 15 260 46 460 270 98 300 33
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref.	37 38 39 40 41 42 43 44 45 46 47 48	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	2,100 4,100 340 810 15 260 46 460 270 98 300 33 36
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref.	37 38 39 40 41 42 43 44 45 46 47 48 49 50	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port	2,100 4,100 340 810 15 260 46 46 270 98 300 33 36 580
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref.	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port	2,100 4,100 340 810 15 260 46 46 270 98 300 33 36 580 4.8
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref.	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City)	2,100 4,100 340 810 15 260 46 46 270 98 300 33 36 580 4.8
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay	2,100 4,100 340 810 15 260 46 46 270 98 300 33 36 580 4.8 65 3,000
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City Fukuoka City	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay	2,100 4,100 340 810 15 260 46 46 460 270 98 300 33 36 580 4.8 65 3,000 310
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City Fukuoka City Saga Pref.	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay	2,100 4,100 340 810 15 260 46 46 460 270 98 300 33 36 580 4.8 65 3,000 310 630
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref.	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay Omura Bay	2,100 4,100 340 810 15 260 46 46 460 270 98 300 33 36 580 4.8 65 3,000 310 630 400
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref.	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay Omura Bay Mouth of Riv. Oita (Oita City)	2,100 4,100 340 810 15 260 46 46 460 270 98 300 33 36 580 4.8 65 3,000 310 630 400 4.0
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref. Miyazaki Pref.	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port 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)	2,100 4,100 340 810 15 260 46 46 460 270 98 300 33 36 580 4.8 65 3,000 310 630 400 4.0 310
Kobe City Nara Pref. Wakayama Pref. Okayama Pref. Hiroshima Pref. Yamaguchi Pref. Tokushima Pref. Kagawa Pref. Ehime Pref. Kochi Pref. Kitakyushu City Fukuoka City Saga Pref. Nagasaki Pref. Oita Pref.	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59	Outside Osaka Port Offshore of Himeji Kobe Port (center) Taisho-bashi Bridge, Riv. Yamato (Oji Town) Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima Kure Port Hiroshima Bay Tokuyama Bay Offshore of Ube Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port Niihama Port Mouth of Riv. Shimanto (Shimanto City) Dokai Bay Hakata Bay Imari Bay Omura Bay Mouth of Riv. Oita (Oita City)	2,100 4,100 340 810 15 260 46 46 460 270 98 300 33 36 580 4.8 65 3,000 310 630 400 4.0

⁽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.

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	23
Median	27
Maximum	2,100
Minimum	tr(0.6)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	71
	2	Tomakomai Port	19
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	2.5
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	18
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	1.7
Akita Pref.	6	Lake Hachiro	24
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	18
Fukushima Pref.	8	Onahama Port	160
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	14
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	2.1
Chiba Pref.		Coast of Ichihara and Anegasaki	23
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	tr(0.7)
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	72
V-1h		Mouth of Riv. Sumida (Minato Ward) Yokohama Port	310
Yokohama City Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	65 27
Kawasaki City	_	Keihin Canal, Port of Kawasaki	85
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	4.7
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	11
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	14
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	2.2
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	7.1
Nagano Pref.		Lake Suwa (center)	33
Shizuoka Pref.		Shimizu Port	14
Silizuoka 1 ici.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	4.6
Aichi Pref.		Kinuura Port	69
THEM TIES.		Nagoya Port	33
Mie Pref.		Yokkaichi Port	150
		Toba Port	31
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	70
<i>S</i>		Lake Biwa (center, offshore of Karasaki)	15
Kyoto Pref.	_	Miyazu Port	18
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	4.1
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	46
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	440
	36	Mouth of Riv. Yodo (Osaka City)	340
		Osaka Port	74
		Outside Osaka Port	65
Hyogo Pref.		Offshore of Himeji	49
Kobe City		Kobe Port (center)	140
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	1.8
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	78
Okayama Pref.	_	Offshore of Mizushima	6.7
Hiroshima Pref.	_	Kure Port	160
Y 1:D 0	45	Hiroshima Bay	62
Yamaguchi Pref.	46	Tokuyama Bay Offshore of Ube	26
			46
Tokushima Pref.	48	Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	4.9 5.5
Kagawa Pref.		Takamatsu Port	
Ehime Pref.	_	Niihama Port	63 tr(0.6)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	10
Kitakyushu City	53	Dokai Bay	2,100
Fukuoka City		Hakata Bay	63
Saga Pref.		Imari Bay	88
Nagasaki Pref.		Omura Bay	59
Oita Pref.		Mouth of Riv. Oita (Oita City)	tr(0.8)
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	35
Kagoshima Pref.		Riv. Amori (Kirishima City)	1.5
		Riv. Gotanda (Ichikikushikino City)	3.7
Okinawa Pref.	61	Naha Port	52
		•	

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

Detection frequency (sample) is based on the number of samples, 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.

[11-4] δ -HCH/sediment (pg/g-dry)

Monitored year: 2019

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

	Aggregated value
Geometric mean	22
Median	23
Maximum	2,500
Minimum	tr(0.2)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	110
	2	Tomakomai Port	14
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	2.6
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	16
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	0.7
Akita Pref.	6	Lake Hachiro	120
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	23
Fukushima Pref.	8	Onahama Port	200
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	21
Tochigi Pref.	+	Tagawa Kyubun Area Head Works (Utsunomiya City)	0.8
Chiba Pref.		Coast of Ichihara and Anegasaki	20
Chiba City		Mouth of Riv. Hanami (Chiba City)	0.6
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	93
		Mouth of Riv. Sumida (Minato Ward)	170
Yokohama City		Yokohama Port	53
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	16
N" - D C		Keihin Canal, Port of Kawasaki	75
Niigata Pref.		Lower Riv. Shinano (Niigata City)	7.8
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	16
Ishikawa Pref. Fukui Pref.		Mouth of Riv. Sai (Kanazawa City)	16
	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	1.1
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	2.4
Nagano Pref.	_	Lake Suwa (center)	68
Shizuoka Pref.	24	Shimizu Port Volcatayla hashi Bridge Riy, Tanggu (Iyyata City)	9.7 2.6
Aichi Pref.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port	
Alcili Piel.		Nagova Port	110 37
Mie Pref.		Yokkaichi Port	170
Mile Fiel.		Toba Port	8.2
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	130
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	37
Kyoto Pref.	_	Miyazu Port	11
Kyoto City	_	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	5.5
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	140
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	380
		Mouth of Riv. Yodo (Osaka City)	190
		Osaka Port	94
	38	Outside Osaka Port	78
Hyogo Pref.	39	Offshore of Himeji	120
Kobe City	40	Kobe Port (center)	140
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	3.1
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	84
Okayama Pref.	43	Offshore of Mizushima	7.1
Hiroshima Pref.	44	Kure Port	100
	45	Hiroshima Bay	51
Yamaguchi Pref.	46		20
	47	Offshore of Ube	59
	48	Offshore of Hagi	4.7
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	5.8
Kagawa Pref.	50	Takamatsu Port	150
Ehime Pref.		Niihama Port	tr(0.2)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	13
Kitakyushu City	53	Dokai Bay	2,500
Fukuoka City		Hakata Bay	76
Saga Pref.	55	,	110
Nagasaki Pref.	_	Omura Bay	60
Oita Pref.		Mouth of Riv. Oita (Oita City)	0.5
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	29
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	1.3
01: 5 0	60	Riv. Gotanda (Ichikikushikino City)	3.1
Okinawa Pref.	61	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.

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

[14] Polybromodiphenyl ethers (Br $_4$ - Br $_{10}$) /sediment (pg/g-dry)

Monitored year: 2019

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

	Aggregated value
Geometric mean	4,900
Median	6,800
Maximum	600,000
Minimum	tr(17)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	2,000
	2	Tomakomai Port	2,900
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	35
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	6,800
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	68
Akita Pref.	6	Lake Hachiro	1,800
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	1,200
Fukushima Pref.	8	Onahama Port	30,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	30,000
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	47
Chiba Pref.	11	Coast of Ichihara and Anegasaki	28,000
Chiba City Tokyo Met.		Mouth of Riv. Hanami (Chiba City) Mouth of Riv. Arakawa (Koto Ward)	780 210,000
Tokyo Met.	14		480,000
Yokohama City		Yokohama Port	34,000
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	9,100
Kawasaki City	17		59,000
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	170
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1,500
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	150,000
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	58
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	720
Nagano Pref.		Lake Suwa (center)	10,000
Shizuoka Pref.		Shimizu Port	2,000
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	120
Aichi Pref.		Kinuura Port	13,000
	27	Nagoya Port	220,000
Mie Pref.	28	Yokkaichi Port	72,000
		Toba Port	3,900
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	16,000
	_	Lake Biwa (center, offshore of Karasaki)	6,700
Kyoto Pref.	32		850
Kyoto City	33		600
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	39,000
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	550,000
	_	Mouth of Riv. Yodo (Osaka City) Osaka Port	30,000
	38		76,000 100,000
Hyogo Pref.	39		8,400
Kobe City		Kobe Port (center)	22,000
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	620
Wakayama Pref.	42		59,000
Okayama Pref.		Offshore of Mizushima	1,400
Hiroshima Pref.		Kure Port	47,000
	45	Hiroshima Bay	62,000
Yamaguchi Pref.	46	Tokuyama Bay	600,000
	47	Offshore of Ube	8,300
	48	Offshore of Hagi	1,100
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(17)
Kagawa Pref.	50		62,000
Ehime Pref.	51		72
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	450
Kitakyushu City	53	Dokai Bay	130,000
Fukuoka City	54	,	7,500
Saga Pref.	55		3,600
Nagasaki Pref.		Omura Bay	1,600
Oita Pref.	57	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	900
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City) Riv. Amori (Kirishima City)	130
Kagoshima Pref.	59 60	Riv. Amori (Kırıshıma City) Riv. Gotanda (Ichikikushikino City)	330 89
Okinawa Pref.	61	Naha Port	45,000
Okiliawa Prel.	01	INGHA I OIL	43,000

⁽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) *: Indicates the sum value of the Quantification [Detection] limits of each congeners. 10-2-32

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	15
Median	14
Maximum	710
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	16
	2	Tomakomai Port	210
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(2)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	6
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(2)
Akita Pref.	6	Lake Hachiro	12
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	5
Fukushima Pref.	8	Onahama Port	230
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	160
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(3)
Chiba Pref.		Coast of Ichihara and Anegasaki	39
Chiba City		Mouth of Riv. Hanami (Chiba City)	7 94
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward)	140
Yokohama City	15		50
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	48
Kawasaki City		Keihin Canal, Port of Kawasaki	710
Niigata Pref.	-	Lower Riv. Shinano (Niigata City)	tr(3)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	14
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	10
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(3)
Yamanashi Pref.	22		tr(4)
Nagano Pref.		Lake Suwa (center)	27
Shizuoka Pref.		Shimizu Port	11
Sinzaoka i ici.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(3)
Aichi Pref.		Kinuura Port	18
		Nagoya Port	22
Mie Pref.		Yokkaichi Port	16
	29	Toba Port	5
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	120
	31	Lake Biwa (center, offshore of Karasaki)	43
Kyoto Pref.	32	Miyazu Port	tr(3)
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(4)
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	110
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	180
		Mouth of Riv. Yodo (Osaka City)	28
	37		170
	38		490
Hyogo Pref.		Offshore of Himeji	11
Kobe City		Kobe Port (center)	25
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	5
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	14
Okayama Pref.	43		6
Hiroshima Pref.		Kure Port	26
Yamaguchi Pref.	45	Hiroshima Bay	14
i amagucini Piei.	46	Tokuyama Bay Offshore of Ube	33
	47	Offshore of Hagi	
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(2) tr(3)
Kagawa Pref.	50	Takamatsu Port	55
Ehime Pref.	51	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(3)
Kitakyushu City	53	Dokai Bay	110
Fukuoka City	54	·	18
Saga Pref.	55		12
Nagasaki Pref.	56		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)	tr(2)
	60	Riv. Gotanda (Ichikikushikino City)	tr(3)
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.

⁽Note 4) nd: Not detected

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	9
Median	9
Maximum	420
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	11
	2	Tomakomai Port	120
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(3)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	7
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(3)
Fukushima Pref.	8	Onahama Port	140
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	95
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	11		21
Chiba City Tokyo Met.		Mouth of Riv. Hanami (Chiba City)	5
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward)	55 80
Yokohama City		Yokohama Port	30
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	33
Kawasaki City	17		420
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	9
Ishikawa Pref.	20		5
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(2)
Nagano Pref.		Lake Suwa (center)	15
Shizuoka Pref.		Shimizu Port	6
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	10
	27	Nagoya Port	11
Mie Pref.	28	Yokkaichi Port	10
		Toba Port	tr(3)
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	54
	_	Lake Biwa (center, offshore of Karasaki)	22
Kyoto Pref.	32		nd
Kyoto City	33		nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	60
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	110
		Mouth of Riv. Yodo (Osaka City)	20
		Osaka Port	110
H Df	38		360
Hyogo Pref. Kobe City	39	Offshore of Himeji Kobe Port (center)	16
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	5 11
Okayama Pref.		Offshore of Mizushima	6
Hiroshima Pref.		Kure Port	19
Tinosinina Tici.	45	Hiroshima Bay	8
Yamaguchi Pref.		Tokuyama Bay	21
Tumaguem Tren		Offshore of Ube	6
	48		tr(2)
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(3)
Kagawa Pref.	50	Takamatsu Port	41
Ehime Pref.	51		nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(3)
Kitakyushu City	53	·	57
Fukuoka City	54	Hakata Bay	14
Saga Pref.	55		9
Nagasaki Pref.	56	Omura Bay	6
Oita Pref.	57	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59		tr(2)
	60	Riv. Gotanda (Ichikikushikino City)	tr(3)
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.

⁽Note 4) nd: Not detected

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	9
Median	9
Maximum	740
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	9
	2	Tomakomai Port	100
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	5
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	10
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	3
Fukushima Pref.	8	Onahama Port	220
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	110
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	3
Chiba Pref.	_	Coast of Ichihara and Anegasaki	34
Chiba City		Mouth of Riv. Hanami (Chiba City)	5
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	70
77 1 1 G':		Mouth of Riv. Sumida (Minato Ward)	110
Yokohama City		Yokohama Port	49
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	51
Niii t - Du-f		Keihin Canal, Port of Kawasaki	740
Niigata Pref. Toyama Pref.		Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(1)
,			8
Ishikawa Pref. Fukui Pref.		Mouth of Riv. Sai (Kanazawa City)	9
Yamanashi Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(1) tr(1)
Nagano Pref.		Lake Suwa (center)	27
Shizuoka Pref.	24	Shimizu Port	5
Silizuoka Piei.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	16
Alcili Fiel.		Nagova Port	25
Mie Pref.	_	Yokkaichi Port	22
when then.		Toba Port	4
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	99
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	32
Kyoto Pref.		Miyazu Port	tr(1)
Kyoto City	_	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(1)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	100
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	180
		Mouth of Riv. Yodo (Osaka City)	25
		Osaka Port	150
	38	Outside Osaka Port	270
Hyogo Pref.	39	Offshore of Himeji	12
Kobe City	40	Kobe Port (center)	9
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	3
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	10
Okayama Pref.	43	Offshore of Mizushima	tr(1)
Hiroshima Pref.	44	Kure Port	25
	45	Hiroshima Bay	19
Yamaguchi Pref.	46		42
	47	Offshore of Ube	6
		Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50		57
Ehime Pref.		Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	67
Fukuoka City		Hakata Bay	6
Saga Pref.	55		4
Nagasaki Pref.	_	Omura Bay	tr(1)
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	tr(1)
01: 5 0	60	Riv. Gotanda (Ichikikushikino City)	tr(1)
Okinawa Pref.	61	Naha Port	38

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

Detection frequency (sample) is based on the number of samples, 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

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	6
Median	5
Maximum	440
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	7
	2	Tomakomai Port	55
Iwate Pref.	3	Toyosawa Bridge, 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	4
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	3
Fukushima Pref.	8	Onahama Port	130
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	69
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	3
Chiba Pref.	_	Coast of Ichihara and Anegasaki	18
Chiba City		Mouth of Riv. Hanami (Chiba City)	4
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	33
		Mouth of Riv. Sumida (Minato Ward)	74
Yokohama City		Yokohama Port	26
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	32
		Keihin Canal, Port of Kawasaki	440
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(1)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	6
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	5
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(1)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(1)
Nagano Pref.	-	Lake Suwa (center)	10
Shizuoka Pref.	24	Shimizu Port	4
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	10
16: D 6		Nagoya Port	7
Mie Pref.		Yokkaichi Port	12
G1: D 0	_	Toba Port	tr(2)
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	52
W , D C	_	Lake Biwa (center, offshore of Karasaki)	17
Kyoto Pref.	_	Miyazu Port	tr(1)
Kyoto City Osaka Pref.		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(1)
		Mouth of Riv. Yamato (Sakai City)	48 86
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) Mouth of Riv. Yodo (Osaka City)	16
		Osaka Port	74
	38	Outside Osaka Port	160
Hyogo Pref.		Offshore of Himeji	4
Kobe City		Kobe Port (center)	5
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	3
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	6
Okayama Pref.	43	Offshore of Mizushima	tr(1)
Hiroshima Pref.		Kure Port	16
Tinosimia Tier.	45	Hiroshima Bay	3
Yamaguchi Pref.	46		6
ramagaem rier.	47	Offshore of Ube	tr(2)
		Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50		33
Ehime Pref.	_	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	31
Fukuoka City		Hakata Bay	5
Saga Pref.	55		3
Nagasaki Pref.	_	Omura Bay	tr(1)
Oita Pref.	_	Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Orda (Orda City) Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	tr(1)
rugosinina i ici.	60	Riv. Gotanda (Ichikikushikino City)	tr(1)
Okinawa Pref.	61	Naha Port	29
OKIHAWA I ICI.	UI	r mana x oxt	<i>∠</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) tr: Detection limit value and more, less than Quantification limit value.

⁽Note 4) nd: Not detected

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	14
Median	17
Maximum	690
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
	2	Tomakomai Port	24
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	17
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	11
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	140
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	44
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	94
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	260
		Mouth of Riv. Sumida (Minato Ward)	610
Yokohama City		Yokohama Port	87
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	24
		Keihin Canal, Port of Kawasaki	300
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(2)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	81
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	54
Shizuoka Pref.	24	Shimizu Port	8
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	16
		Nagoya Port	290
Mie Pref.		Yokkaichi Port	170
		Toba Port	11
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	230
T . D .C		Lake Biwa (center, offshore of Karasaki)	29
Kyoto Pref.		Miyazu Port	tr(3)
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	180
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	480
		Mouth of Riv. Yodo (Osaka City) Osaka Port	230
	38	Outside Osaka Port	180
Hyogo Pref.		Offshore of Himeji	27
Kobe City		Kobe Port (center)	50
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	8
Okayama Pref.	43	Offshore of Mizushima	13
Hiroshima Pref.		Kure Port	45
Tinosiiiia Tici.	45	Hiroshima Bay	230
Yamaguchi Pref.	46	†	690
ramagacin r ici.	47	Offshore of Ube	38
		Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	110
Ehime Pref.		Niihama Port	tr(3)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	140
Fukuoka City		Hakata Bay	22
Saga Pref.	55		17
Nagasaki Pref.		Omura Bay	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	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.

⁽Note 4) nd : Not detected

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	4
Median	tr(3)
Maximum	150
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
	2	Tomakomai Port	13
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	nd
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	tr(2)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	48
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	13
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	10
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	24
		Mouth of Riv. Sumida (Minato Ward)	150
Yokohama City		Yokohama Port	13
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	8
		Keihin Canal, Port of Kawasaki	150
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
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)	nd
Nagano Pref.	23	Lake Suwa (center)	7
Shizuoka Pref.	24	Shimizu Port	nd
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.	26	Kinuura Port	tr(3)
	27	Nagoya Port	4
Mie Pref.	28	Yokkaichi Port	66
	29	Toba Port	nd
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	140
	31	Lake Biwa (center, offshore of Karasaki)	6
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)	59
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	82
 		Mouth of Riv. Yodo (Osaka City)	14
 	37	Osaka Port	34
	38	Outside Osaka Port	73
Hyogo Pref.		Offshore of Himeji	5
Kobe City	40	Kobe Port (center)	4
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(3)
Okayama Pref.	43	Offshore of Mizushima	13
Hiroshima Pref.	44	Kure Port	10
	45	Hiroshima Bay	tr(3)
Yamaguchi Pref.	46		9
 	47	Offshore of Ube	6
	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	17
Ehime Pref.		Niihama Port	tr(3)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	14
Fukuoka City	54	Hakata Bay	tr(3)
Saga Pref.	ı ~~¯	Imari Bay	nd
	55		
Nagasaki Pref.		Omura Bay	nd
Nagasaki Pref. Oita Pref.	56	Omura Bay Mouth of Riv. Oita (Oita City)	nd nd
	56	·	
Oita Pref.	56 57	Mouth of Riv. Oita (Oita City)	nd
Oita Pref. Miyazaki Pref.	56 57 58	Mouth of Riv. Oita (Oita City) Mouth of Riv. Oyodo (Miyazaki 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

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

Monitored year: 2019

Detection Frequency (site): 38/61 (Missing value: 0)
Detection Frequency (sample): 38/61 (Missing value: 0)

	Aggregated value
Geometric mean	tr(4)
Median	tr(3)
Maximum	55
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
	2	Tomakomai Port	5
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(3)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	4
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	30
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	6
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	6
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	24
	_	Mouth of Riv. Sumida (Minato Ward)	39
Yokohama City		Yokohama Port	10
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	6
N" - D C	_	Keihin Canal, Port of Kawasaki	45
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(2)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	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.		Lake Suwa (center)	12
Shizuoka Pref.	24	Shimizu Port Volestayla heeki Bridge Biy, Tanguy (Iyyata City)	tr(3)
Aichi Pref.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port	nd tr(2)
Alcili Piel.		Nagova Port	tr(2)
Mie Pref.		Yokkaichi Port	13
Mile Fiel.		Toba Port	tr(2)
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	25
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	6
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	23
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	27
		Mouth of Riv. Yodo (Osaka City)	6
		Osaka Port	26
	38	Outside Osaka Port	34
Hyogo Pref.	39	Offshore of Himeji	tr(3)
Kobe City	40	Kobe Port (center)	5
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	tr(3)
Okayama Pref.	43	Offshore of Mizushima	nd
Hiroshima Pref.	44	Kure Port	6
	45	Hiroshima Bay	25
Yamaguchi Pref.	46		55
	47	Offshore of Ube	9
		Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50		11
Ehime Pref.		Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	16
Fukuoka City		Hakata Bay	tr(3)
Saga Pref.	55	,	tr(3)
Nagasaki Pref.		Omura Bay	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
01: 70.0	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	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

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	15
Median	11
Maximum	1,400
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(5)
Tromando	2	Tomakomai Port	10
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	11
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	16
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	110
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	18
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	100
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	320
	_	Mouth of Riv. Sumida (Minato Ward)	1,400
Yokohama City		Yokohama Port	140
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	11
		Keihin Canal, Port of Kawasaki	78
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	7
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	75
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	_	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	84
Shizuoka Pref.		Shimizu Port Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(4)
Aichi Pref.		Kinuura Port	nd 15
Alcili Piei.		Nagoya Port	410
Mie Pref.		Yokkaichi Port	450
WHE FIEL.		Toba Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	120
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	42
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	190
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	580
		Mouth of Riv. Yodo (Osaka City)	72
		Osaka Port	290
	38	Outside Osaka Port	190
Hyogo Pref.	39	Offshore of Himeji	40
Kobe City	40	Kobe Port (center)	64
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	11
Okayama Pref.	43	Offshore of Mizushima	nd
Hiroshima Pref.	_	Kure Port	77
	45	Hiroshima Bay	200
Yamaguchi Pref.	46		430
	47		45
	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	41
Ehime Pref.	_	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd 150
Kitakyushu City	53	Dokai Bay	150
Fukuoka City		Hakata Bay	7
Saga Pref.		Imari Bay Omura Bay	8 8
Nagasaki Pref.		, , , , , , , , , , , , , , , , , , ,	
Oita Pref. Miyazaki Pref.		Mouth of Riv. Oita (Oita City) Mouth of Riv. Oveda (Miyazaki City)	nd nd
Kagoshima Pref.		Mouth of Riv. Oyodo (Miyazaki City) Riv. Amori (Kirishima City)	nd
Kagosiiima Pref.	60	Riv. Amori (Kirisnima City) Riv. Gotanda (Ichikikushikino City)	nd nd
Okinawa Pref.	61	Naha Port	81
Okinawa Fici.	UΙ	I valia I Oit	01

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

Detection frequency (sample) is based on the number of samples, 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

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

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

Monitored year: 2019

Detection Frequency (site): 38/61 (Missing value: 0) Detection Frequency (sample): 38/61 (Missing value: 0)

	A
	Aggregated value
Geometric mean	11
Median	8
Maximum	1,200
Minimum	nd

Hokkaido			Measured value
	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(5)
	2	Tomakomai Port	tr(5)
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	tr(4)
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	8
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	84
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	8
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	64
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	160
		Mouth of Riv. Sumida (Minato Ward)	1,200
Yokohama City		Yokohama Port	84
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	11
		Keihin Canal, Port of Kawasaki	78
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(4)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	27
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	35
Shizuoka Pref.	24	Shimizu Port	nd
Sinzuoka i ici.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	8
7 Helli I Iei.		Nagoya Port	140
Mie Pref.		Yokkaichi Port	370
WHE I ICI.		Toba Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	69
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	27
Kyoto Pref.		Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	98
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	290
Osaka City		Mouth of Riv. Yodo (Osaka City)	
-	37	Osaka Port	36 120
Hyana Duaf		Outside Osaka Port Offshore of Himeji	110
Hyogo Pref.		,	40
Kobe City		Kobe Port (center)	
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	6
Okayama Pref.		Offshore of Mizushima	nd 20
Hiroshima Pref.		Kure Port	30
V 1: D C		Hiroshima Bay	56
Yamaguchi Pref.		Tokuyama Bay	130
-		Offshore of Ube	45
m 1 1: D 0		Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	41
Ehime Pref.		Niihama Port	nd
Kochi Pref.		Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City		Dokai Bay	57
Fukuoka City		Hakata Bay	7
Saga Pref.		Imari Bay	8
Nagasaki Pref.		Omura Bay	8
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	31

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

Detection frequency (sample) is based on the number of samples, 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

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	33
Median	47
Maximum	2,000
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	20
	2	Tomakomai Port	26
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	32
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	39
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	12
Fukushima Pref.	8	Onahama Port	340
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	91
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	220
Chiba City		Mouth of Riv. Hanami (Chiba City)	5
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	980
		Mouth of Riv. Sumida (Minato Ward)	1,500
Yokohama City		Yokohama Port	240
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	68
N" - D C		Keihin Canal, Port of Kawasaki	340
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	25
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	350
Fukui Pref. Yamanashi Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd tw(1)
Nagano Pref.		Lake Suwa (center)	tr(1) 220
Shizuoka Pref.		Shimizu Port	19
Silizuoka Piei.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	79
Alcin Fici.		Nagoya Port	1,400
Mie Pref.		Yokkaichi Port	770
1,110 1 1011		Toba Port	47
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	260
<i>G</i>		Lake Biwa (center, offshore of Karasaki)	84
Kyoto Pref.		Miyazu Port	7
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	4
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	510
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	2,000
	36	Mouth of Riv. Yodo (Osaka City)	99
		Osaka Port	1,500
		Outside Osaka Port	540
Hyogo Pref.		Offshore of Himeji	140
Kobe City		Kobe Port (center)	110
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	6
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	95
Okayama Pref.		Offshore of Mizushima	11
Hiroshima Pref.		Kure Port	270
Vamagur-1: D. C	45	Hiroshima Bay	610
Yamaguchi Pref.	46		1,500 50
	48	Offshore of Hagi	8
Tokushima Pref.	48	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	-	Takamatsu Port	360
Ehime Pref.		Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	5
Kitakyushu City	53	Dokai Bay	550
Fukuoka City		Hakata Bay	47
Saga Pref.		Imari Bay	32
Nagasaki Pref.		Omura Bay	9
Oita Pref.		Mouth of Riv. Oita (Oita City)	tr(1)
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
-	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	280

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

Detection frequency (sample) is based on the number of samples, 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

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	310
Median	420
Maximum	40,000
Minimum	nd

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	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	380
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(3)
Akita Pref.	6	Lake Hachiro	180
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	70
Fukushima Pref.	8	Onahama Port	2,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	2,100
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	5
Chiba Pref.	11		1,400
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	36
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	11,000
W 1 1 C'	14	Mouth of Riv. Sumida (Minato Ward) Yokohama Port	8,200
Yokohama City			2,100 490
Kawasaki City	17	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	
Niigata Braf		,	3,100
Niigata Pref. Toyama Pref.		Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	130
Ishikawa Pref.	20		10,000
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(2)
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Shoho (Tsuruga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	48
Nagano Pref.		Lake Suwa (center)	840
Shizuoka Pref.		Shimizu Port	140
Silizuoka Fiel.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	8
Aichi Pref.		Kinuura Port	1,000
Alciii I Ici.	27	Nagoya Port	14,000
Mie Pref.		Yokkaichi Port	2,000
WHE TIEL.		Toba Port	390
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	1,000
2		Lake Biwa (center, offshore of Karasaki)	460
Kyoto Pref.	32		72
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	54
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	3,400
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	21,000
	36	Mouth of Riv. Yodo (Osaka City)	1,700
	37	Osaka Port	11,000
	38	Outside Osaka Port	3,600
Hyogo Pref.	39	ı J	1,000
Kobe City		Kobe Port (center)	1,200
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	64
Wakayama Pref.	42		3,300
Okayama Pref.	_	Offshore of Mizushima	130
Hiroshima Pref.		Kure Port	2,400
	45	Hiroshima Bay	6,300
Yamaguchi Pref.		Tokuyama Bay	40,000
	47		600
m 1 11 n c	48		100
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.		Takamatsu Port	2,100
Ehime Pref.	51 52		53
Kochi Pref. Kitakyushu City	_	Mouth of Riv. Shimanto (Shimanto City) Dokai Bay	
Fukuoka City	53	Hakata Bay	5,000 420
Saga Pref.	55		240
Nagasaki Pref.		Omura Bay	43
Oita Pref.	57	,	58
Miyazaki Pref.	58	Mouth of Riv. Orda (Orda City) Mouth of Riv. Oyodo (Miyazaki City)	9
Kagoshima Pref.	59		11
Kagosiiiiia Fiel.	60	Riv. Gotanda (Ichikikushikino City)	9
Okinawa Pref.	61	Naha Port	2,500
Okinawa 1101.	01	1 mm 1 VII	2,500

⁽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.

⁽Note 4) nd: Not detected

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	4,400
Median	6,300
Maximum	560,000
Minimum	14

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1,800
	2	Tomakomai Port	2,300
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	33
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	6,300
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	63
Akita Pref.	6	Lake Hachiro	1,500
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	1,100
Fukushima Pref.	8	Onahama Port	27,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	27,000
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	36
Chiba Pref.	_	Coast of Ichihara and Anegasaki	26,000
Chiba City		Mouth of Riv. Hanami (Chiba City)	730
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	200,000
V 1 1 C'		Mouth of Riv. Sumida (Minato Ward)	470,000
Yokohama City Kawasaki City	_	Yokohama Port	31,000
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	8,400
Niigata Brof	_	,	54,000
Niigata Pref. Tovama Pref.		Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	150
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1,300
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	52
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Shoho (Tsuruga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	670
Nagano Pref.		Lake Suwa (center)	8,800
Shizuoka Pref.		Shimizu Port	1,800
Silizuoka 1 lei.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	110
Aichi Pref.		Kinuura Port	12,000
Aucili I Ici.		Nagoya Port	200,000
Mie Pref.		Yokkaichi Port	69,000
		Toba Port	3,400
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	14,000
<i>G</i>		Lake Biwa (center, offshore of Karasaki)	6,000
Kyoto Pref.	_	Miyazu Port	760
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	540
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	35,000
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	530,000
	36	Mouth of Riv. Yodo (Osaka City)	28,000
		Osaka Port	63,000
		Outside Osaka Port	97,000
Hyogo Pref.		Offshore of Himeji	7,200
Kobe City		Kobe Port (center)	21,000
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	540
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	56,000
Okayama Pref.	_	Offshore of Mizushima	1,200
Hiroshima Pref.	_	Kure Port	44,000
Yamaguchi Pref.	45 46	Hiroshima Bay Tokuyama Bay	55,000 560,000
i amaguciii Pref.		Offshore of Ube	7,600
	47	Offshore of Hagi	970
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	9/0
Kagawa Pref.		Takamatsu Port	59,000
Ehime Pref.	_	Niihama Port	60
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	390
Kitakyushu City	53	Dokai Bay	120,000
Fukuoka City		Hakata Bay	7,000
Saga Pref.		Imari Bay	3,300
Nagasaki Pref.		Omura Bay	1,500
Oita Pref.		Mouth of Riv. Oita (Oita City)	840
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	120
Kagoshima Pref.	_	Riv. Amori (Kirishima City)	320
		Riv. Gotanda (Ichikikushikino City)	76
Okinawa Pref.	61	Naha Port	42,000

⁽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.

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

Monitored year: 2019

Detection Frequency (site): 60/61 (Missing value: 0)
Detection Frequency (sample): 60/61 (Missing value: 0)

Detection limit: 4 Quantification limit: 9

	Aggregated value
Geometric mean	44
Median	46
Maximum	460
Minimum	nd

2	64 95 r(7) 42 33
2 Tomakomai Port 1.	r(7) 42 33
Miyagi Pref. 4 Sendai Bay (Matsushima Bay)	42 33
Sendai City	33
Akita Pref. 6 Lake Hachiro Yamagata Pref. 7 Mouth of Riv. Mogami (Sakata City)	
Yamagata Pref. 7 Mouth of Riv. Mogami (Sakata City) Fukushima Pref. 8 Onahama Port Ibaraki Pref. 9 Tonchagi Pref. 10 Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba City 12 Mouth of Riv. Manami (Chiba City) th Tokyo Met. 13 Mouth of Riv. Hanami (Chiba City) 1 Yokohama City 15 Yokohama Port 4 Kawasaki City 16 Mouth of Riv. Sumida (Minato Ward) 4 Yokohama City 15 Yokohama Port 1 Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 1 Toyama Pref. 18 Lower Riv. Shinano (Niigata City) 1 Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 1 Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) 1 Yamanashi Pref. 21 Mishima-bashi Bridge, Riv. Arakawa (Kofu City) 2 Nagano Pref. 23 Lake Suwa (center) 1 Shimizu Port	
Fukushima Pref. 8	42
Ibaraki Pref. 9 Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City) Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Usunomiya City) 12 Mouth of Riv. Hanami (Chiba City) 12 Mouth of Riv. Hanami (Chiba City) 13 Mouth of Riv. Arakawa (Koto Ward) 14 Mouth of Riv. Arakawa (Koto Ward) 15 Yokohama City 16 Mouth of Riv. Sumida (Minato Ward) 17 Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 17 Keihin Canal, Port of Kawasaki City 18 Lower Riv. Shinano (Niigata City) 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 19 Hagiura-bashi Bridge, Riv. Shono (Tsuruga City) 19 19 19 19 19 19 19 1	39
Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) Chiba Pref. 11 Coast of Ichihara and Anegasaki 2 2 Mouth of Riv. Hanami (Chiba City) 1 Mouth of Riv. Arakawa (Koto Ward) 1 Mouth of Riv. Sumida (Minato Ward) 4 Mouth of Riv. Sumida (Minato Ward) 1 Kawasaki City 15 Mouth of Riv. Tama (Kawasaki City) 17 Keihin Canal, Port of Kawasaki 1 Mouth of Riv. Tama (Kawasaki City) 17 Keihin Canal, Port of Kawasaki 1 Mouth of Riv. Tama (Kawasaki City) 17 Keihin Canal, Port of Kawasaki 1 Majura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 18 Lower Riv. Shinano (Niigata City) 1 Mouth of Riv. Sai (Kanazawa City) 1 Majura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 1 Majura-bashi Bridge, Riv. Shono (Tsuruga City) 1 Majura-bashi Bridge, Riv. Arakawa (Kofu City) 1 Majura-bashi Bridge, Riv. Tenryu (Iwata City) 1 Majura Port 2 Shimizu Port 2 Shimizu Port 2 Majura Port 3 Lake Biwa (center, offshore of Minamihira) 2 Lake Biwa (center, offshore of Karasaki) 1 Mouth of Riv. Yamato (Sakai City) 3 Miyamae-bashi Bridge, Riv. Oh-kawa (Osaka City) 3 Mouth of Riv. Yamato (Sakai City) 3 Mouth of Riv. Mouth of Riv. Mouth of Riv. Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 4 Muthora Pref. 4 Kirokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 4 Kirokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 4 Kirokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 4 Kirokawa-ohashi Bridge, Mouth of	25
Chiba Pref. 11 Coast of Ichihara and Anegasaki 2 Chiba City 12 Mouth of Riv. Hanami (Chiba City) b Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 14 Yokohama City 15 Yokohama Port 1 Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 1 Niigata Pref. 18 Lower Riv. Shinano (Niigata City) 1 Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 1 Ishikawa Pref. 10 Mouth of Riv. Sai (Kanazawa City) 1 Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 2 Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) 2 Yamanashi Pref. 23 Lake Suwa (center) 1 Shizuoka Pref. 24 Shimizu Port 2 Aichi Pref. 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 2 Aichi Pref. 26 Kinuura Port 2 Mie Pref. 28 Yokkaichi Port 2	61
Chiba City	40
Tokyo Met.	240
Yokohama City 15 Yokohama Port 16 Mouth of Riv. Sumida (Minato Ward) 17 Keihin Canal, Port of Kawasaki 18 Lower Riv. Shinano (Niigata City) 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 19 Hagiura-bashi Bridge, Riv. Shono (Tsuruga City) 10 Yamanashi Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) 23 Lake Suwa (center) 24 Shimizu Port 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 26 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 27 Nagoya Port 28 Yokkaichi Port 29 Toba Port 20 Toba Port 20 Toba Port 21 Nigawa (center, offshore of Minamihira) 20 Toba Port 21 Nigawa Port 22 Toba Port 23 Miyawa Port 24 Mouth of Riv. Yamato (Sakai City) 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 36 Mouth of Riv. Yamato (Sakai City) 37 Osaka Port 38 Outside Osaka Port 39 Offshore of Himeji 30 Offshore of Himeji 31 Kobe City 32 Miyawa Porf. 33 Offshore of Mizushima 34 Kure Port 35 Kincawa-ohashi Bridge, Riv. Yamato (Oji Town) 36 Mowayama Pref. 37 Offshore of Mizushima	r(8)
Yokohama City	190
Kawasaki City	160 170
Niigata Pref. 18	130
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. Shono (Tsuruga City) Nagano Pref. 23 Lake Suwa (center) Shizuoka Pref. 24 Shimizu Port 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Aichi Pref. 26 Kinuura Port 27 Nagoya Port Mie Pref. 28 Yokkaichi Port 29 Toba Port Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 31 Lake Biwa (center, offshore of Karasaki) Kyoto Pref. 32 Miyazu Port Kyoto City 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 36 Mouth of Riv. Yodo (Osaka City) 37 Osaka Port 38 Outside Osaka Port Hyogo Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 43 Offshore of Mizushima Hiroshima Pref. 44 Kure Port	170
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) Shizuoka Pref. 24 Shimizu Port 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Aichi Pref. 26 Kinuura Port 17 Nagoya Port Mie Pref. 28 Yokkaichi Port 29 Toba Port Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) I Lake Biwa (center, offshore of Karasaki) Kyoto Pref. 32 Miyazu Port Kyoto City 33 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City) Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) Tosaka Port 37 Osaka Port 38 Outside Osaka Port 39 Offshore of Himeji Kobe City 40 Kobe Port (center) Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 44 Kure Port	r(5)
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) Shizuoka Pref. 24 Shimizu Port 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Aichi Pref. 26 Kinuura Port 27 Nagoya Port Wie Pref. 28 Yokkaichi Port 29 Toba Port Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 31 Lake Biwa (center, offshore of Karasaki) Kyoto Pref. 32 Miyazu Port Kyoto City 33 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City) Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 36 Mouth of Riv. Yodo (Osaka City) 37 Osaka Port 38 Outside Osaka Port 39 Offshore of Himeji Kobe City 40 Kobe Port (center) Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 44 Kure Port	24
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) Shizuoka Pref. 24 Shimizu Port 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Aichi Pref. 26 Kinuura Port 27 Nagoya Port Mie Pref. 28 Yokkaichi Port 29 Toba Port Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 1 Lake Biwa (center, offshore of Karasaki) Kyoto Pref. 32 Miyazu Port Kyoto City 33 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City) Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 36 Mouth of Riv. Yodo (Osaka City) 37 Osaka Port 38 Outside Osaka Port 39 Offshore of Himeji Kobe City 40 Kobe Port (center) Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 44 Kure Port	24 24
Yamanashi Pref.22Senshu-bashi Bridge, Riv. Arakawa (Kofu City)Nagano Pref.23Lake Suwa (center)Shizuoka Pref.24Shimizu Port25Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)Aichi Pref.26Kinuura Port27Nagoya PortMie Pref.28Yokkaichi Port29Toba PortShiga Pref.30Lake Biwa (center, offshore of Minamihira)2231Lake Biwa (center, offshore of Karasaki)1Kyoto Pref.32Miyazu PortKyoto City33Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)Osaka Pref.34Mouth of Riv. Yamato (Sakai City)Osaka City35Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)36Mouth of Riv. Yodo (Osaka City)37Osaka Port349Offshore of Himeji1Kobe City40Kobe Port (center)Nara Pref.41Taisho-bashi Bridge, Riv. Yamato (Oji Town)Wakayama Pref.42Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)Okayama Pref.43Offshore of MizushimaHiroshima Pref.44Kure Port	9
Nagano Pref. 23 Lake Suwa (center) Shizuoka Pref. 24 Shimizu Port 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Aichi Pref. 26 Kinuura Port 27 Nagoya Port Mie Pref. 28 Yokkaichi Port 29 Toba Port 30 Lake Biwa (center, offshore of Minamihira) 31 Lake Biwa (center, offshore of Karasaki) Kyoto Pref. 32 Miyazu Port Kyoto City 33 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City) Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) Mouth of Riv. Yodo (Osaka City) 36 Mouth of Riv. Yodo (Osaka City) Thyogo Pref. 39 Offshore of Himeji Kobe City 40 Kobe Port (center) Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 44 Kure Port	22
Shizuoka Pref. 24 Shimizu Port 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Aichi Pref. 26 Kinuura Port 27 Nagoya Port 28 Yokkaichi Port 29 Toba Port 20 Take Biwa (center, offshore of Minamihira) 20 Toba Port 20 Toba P	130
25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Aichi Pref. 26 Kinuura Port 27 Nagoya Port Mie Pref. 28 Yokkaichi Port 29 Toba Port Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 31 Lake Biwa (center, offshore of Karasaki) Kyoto Pref. 32 Miyazu Port Kyoto City 33 Miyamae-bashi Bridge, Riv. Katsura (Kyoto City) Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 36 Mouth of Riv. Yodo (Osaka City) 37 Osaka Port 38 Outside Osaka Port 39 Offshore of Himeji Kobe City 40 Kobe Port (center) Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 43 Offshore of Mizushima Hiroshima Pref. 44 Kure Port	12
Aichi Pref. 26 Kinuura Port 27 Nagoya Port	19
Mie Pref. 28 Yokkaichi Port 29 Toba Port 29 Toba Port 29 Toba Port 29 Toba Port 31 Lake Biwa (center, offshore of Minamihira) 21 Lake Biwa (center, offshore of Karasaki) 1 Kyoto Pref. 32 Miyazu Port 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) 34 Mouth of Riv. Yamato (Sakai City) 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 36 Mouth of Riv. Yodo (Osaka City) 37 Osaka Port 38 Outside Osaka Port 39 Offshore of Himeji 30 Offshore of Himeji 31 Kobe City 40 Kobe Port (center) 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 43 Offshore of Mizushima 44 Kure Port 45 Offshore of Mizushima 46 Offshore of Mizushima 47 Offshore of Mizushima 48 Offshore of Mizushima 49 Offshore of Mizushima 40 Offshore of Mizushima 40 Offshore of Mizushima 40 Offshore of Mizushima 40 Offshore of Mizushima 41 Offshore of Mizushima 42 Offshore of Mizushima 44 Offshore of Mizushima 45 Offshore of Mizushima 46 Offshore of Mizushima 47 Offshore of Mizushima 48 Offshore of Mizushima 49 Offshore of Mizushima 40 Osaka Port 40 Osaka Port 40 Osaka Port 40 Osaka	98
Mie Pref. 28 Yokkaichi Port 29 Toba Port Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 2 I Lake Biwa (center, offshore of Karasaki) 1 Kyoto Pref. 32 Miyazu Port Kyoto City 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 1 Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 1 Mouth of Riv. Yodo (Osaka City) 1 Wosaka Port 1 Kobe City 40 Kobe Port (center) 1 Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) 1 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 1 Okayama Pref. 43 Offshore of Mizushima 1 Hiroshima Pref. 44 Kure Port	69
Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 2 I Lake Biwa (center, offshore of Karasaki) 1 Kyoto Pref. 32 Miyazu Port Kyoto City 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 1 Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 36 Mouth of Riv. Yodo (Osaka City) 37 Osaka Port 38 Outside Osaka Port 38 Outside Osaka Port 39 Offshore of Himeji 1 Kobe City 40 Kobe Port (center) Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 43 Offshore of Mizushima	55
Syoto Pref. 32 Miyazu Port	45
Kyoto Pref.32Miyazu PortKyoto City33Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)Osaka Pref.34Mouth of Riv. Yamato (Sakai City)1Osaka City35Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)136Mouth of Riv. Yodo (Osaka City)37Osaka Port138Outside Osaka Port33Hyogo Pref.39Offshore of Himeji1Kobe City40Kobe Port (center)1Nara Pref.41Taisho-bashi Bridge, Riv. Yamato (Oji Town)Wakayama Pref.42Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)Okayama Pref.43Offshore of MizushimaHiroshima Pref.44Kure Port	270
Kyoto City 33 Miyamae-bashi Bridge,Riv. Katsura (Kyoto City) Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 1 Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 1 36 Mouth of Riv. Yodo (Osaka City) 37 Osaka Port 1 38 Outside Osaka Port 3 Offshore of Himeji 1 Kobe City 40 Kobe Port (center) 4 Kobe Port (center) Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) 4 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 43 Offshore of Mizushima Hiroshima Pref. 44 Kure Port 44 Kure Port	170
Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 1 Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 1 36 Mouth of Riv. Yodo (Osaka City) 37 Osaka Port 1 38 Outside Osaka Port 3 Offshore of Himeji 1 Kobe City 40 Kobe Port (center) 4 Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) 4 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 0 Okayama Pref. 43 Offshore of Mizushima 44 Hiroshima Pref. 44 Kure Port	15
Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 1 36 Mouth of Riv. Yodo (Osaka City) 37 Osaka Port 1 38 Outside Osaka Port 38 Outside Osaka Port 39 Offshore of Himeji 1 Kobe City 40 Kobe Port (center) 40 Kobe Port (center) 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 0 <	47
36 Mouth of Riv. Yodo (Osaka City) 37 Osaka Port 38 Outside Osaka Port 39 Offshore of Himeji 10 Kobe City 30 Kobe Port (center) 31 Kobe City 40 Kobe Port (center) 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 43 Offshore of Mizushima 44 Kure Port	160
37 Osaka Port 1 38 Outside Osaka Port 39 Offshore of Himeji 1 1 1 1 1 1 1 1 1	120
38 Outside Osaka Port Hyogo Pref. 39 Offshore of Himeji Kobe City 40 Kobe Port (center) Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 43 Offshore of Mizushima Hiroshima Pref. 44 Kure Port	54
Hyogo Pref. 39 Offshore of Himeji Kobe City 40 Kobe Port (center) Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 43 Offshore of Mizushima Hiroshima Pref. 44 Kure Port	190
Kobe City 40 Kobe Port (center) Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 43 Offshore of Mizushima Hiroshima Pref. 44 Kure Port	300
Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 43 Offshore of Mizushima Hiroshima Pref. 44 Kure Port	120
Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Okayama Pref. 43 Offshore of Mizushima Hiroshima Pref. 44 Kure Port	92
Okayama Pref. 43 Offshore of Mizushima Hiroshima Pref. 44 Kure Port	46
Hiroshima Pref. 44 Kure Port	39
	46 70
45 Hiroshima Bay	79 58
	10
	26
	11
	r(5)
	54
	15
	nd
	46
· · ·	72
	18
	170
	r(6)
Miyazaki Pref. 58 Mouth of Riv. Oyodo (Miyazaki City)	13
Kagoshima Pref. 59 Riv. Amori (Kirishima City)	9
` ''	18
Okinawa Pref. 61 Naha Port	

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

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

⁽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: 2019

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

	Aggregated value
Geometric mean	21
Median	22
Maximum	190
Minimum	tr(3)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	20
	2	Tomakomai Port	11
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	8
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	21
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	25
Akita Pref.	6	Lake Hachiro	26
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	8
Fukushima Pref.	8	Onahama Port	20
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	10
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	9
Chiba Pref.	_	Coast of Ichihara and Anegasaki	57
Chiba City		Mouth of Riv. Hanami (Chiba City)	8
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	36
		Mouth of Riv. Sumida (Minato Ward)	32
Yokohama City		Yokohama Port	23
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	16
		Keihin Canal, Port of Kawasaki	62
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(4)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	5
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	21
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	16
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	34
Nagano Pref.	_	Lake Suwa (center)	17
Shizuoka Pref.	24	Shimizu Port	23
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	16
Aichi Pref.		Kinuura Port	8
		Nagoya Port	10
Mie Pref.		Yokkaichi Port	12
G1: D 0	_	Toba Port	20
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	89
T . D .C	_	Lake Biwa (center, offshore of Karasaki)	71
Kyoto Pref.	_	Miyazu Port	50
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	34
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	54
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	160
		Mouth of Riv. Yodo (Osaka City) Osaka Port	45
	37	Outside Osaka Port	56
Hyana Daaf		Offshore of Himeji	120 41
Hyogo Pref. Kobe City		Kobe Port (center)	34
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	40
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	22
Okayama Pref.	43	Offshore of Mizushima	19
Hiroshima Pref.		Kure Port	10
Tillosiiilla Tiet.	45	Hiroshima Bay	14
Yamaguchi Pref.	46		27
ramaguem r iei.	47	Offshore of Ube	9
		Offshore of Hagi	36
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	5
Kagawa Pref.	50		23
Ehime Pref.	_	Niihama Port	27
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	tr(3)
Kitakyushu City	53	Dokai Bay	40
Fukuoka City		Hakata Bay	36
Saga Pref.	55		55
Nagasaki Pref.	_	Omura Bay	190
Oita Pref.	_	Mouth of Riv. Oita (Oita City)	5
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	27
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	tr(4)
ragosimila i ici.	60	Riv. Gotanda (Ichikikushikino City)	9
Okinawa Pref.	61	Naha Port	12
OKINAWA I ICI.	0.1	1- 1000 - Val	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.

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	29
Median	27
Maximum	3,300
Minimum	1.2

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	110
	2	Tomakomai Port	92
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	5.6
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	63
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	1.7
Akita Pref.	6	Lake Hachiro	29
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	55
Fukushima Pref.	8	Onahama Port	3,300
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	300
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	2.2
Chiba Pref.		Coast of Ichihara and Anegasaki	80
Chiba City		Mouth of Riv. Hanami (Chiba City)	1.7
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	860
V-11		Mouth of Riv. Sumida (Minato Ward) Yokohama Port	490
Yokohama City Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	120 83
Kawasaki City		Keihin Canal, Port of Kawasaki	790
Niigata Brof		, , , , , , , , , , , , , , , , , , ,	7.3
Niigata Pref. Toyama Pref.		Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	27
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	55
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	4.0
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Shoho (Tsutuga City)	2.4
Nagano Pref.		Lake Suwa (center)	200
Shizuoka Pref.		Shimizu Port	20
Silizuoka 1 ici.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	14
Aichi Pref.		Kinuura Port	16
THOM THOS.		Nagoya Port	26
Mie Pref.		Yokkaichi Port	110
		Toba Port	29
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	89
<i>G</i>		Lake Biwa (center, offshore of Karasaki)	13
Kyoto Pref.		Miyazu Port	5.7
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	21
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	91
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	250
	36	Mouth of Riv. Yodo (Osaka City)	46
		Osaka Port	200
		Outside Osaka Port	100
Hyogo Pref.		Offshore of Himeji	25
Kobe City		Kobe Port (center)	37
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	3.0
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	51
Okayama Pref.		Offshore of Mizushima	7.8
Hiroshima Pref.		Kure Port	34
V 11B C	45	Hiroshima Bay	18
Yamaguchi Pref.	46		33
		Offshore of Use	14
Tokushima Pref.	48	Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	3.7
Kagawa Pref.	-	Takamatsu Port	8.2
Ehime Pref.		Niihama Port	51 13
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	16
Kitakyushu City	53	Dokai Bay	1,300
Fukuoka City		Hakata Bay	14
Saga Pref.		Imari Bay	24
Nagasaki Pref.		Omura Bay	27
Oita Pref.		Mouth of Riv. Oita (Oita City)	2.3
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	4.8
Kagoshima Pref.		Riv. Amori (Kirishima City)	1.2
	60	Riv. Gotanda (Ichikikushikino City)	1.7
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.

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

Monitored year: 2019

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

Detection limit: *2.7 Quantification limit: *7.3

	Aggregated value
Geometric mean	600
Median	720
Maximum	58,000
Minimum	13

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	390
	2	Tomakomai Port	270
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	26
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	550
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	140
Akita Pref.	6	Lake Hachiro	440
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	280
Fukushima Pref.	8	Onahama Port	2,800
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	1,200
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	99
Chiba Pref.	_	Coast of Ichihara and Anegasaki	2,200
Chiba City		Mouth of Riv. Hanami (Chiba City)	43
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward)	3,600 15,000
Yokohama City		Yokohama Port	24,000
Kawasaki City	_	Mouth of Riv. Tama (Kawasaki City)	4,700
Kawasaki City	_	Keihin Canal, Port of Kawasaki	58,000
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	95
Tovama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	280
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	830
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	19
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	47
Nagano Pref.		Lake Suwa (center)	2,300
Shizuoka Pref.		Shimizu Port	530
Silizuoka 1 ici.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	62
Aichi Pref.		Kinuura Port	850
111011111111		Nagoya Port	630
Mie Pref.		Yokkaichi Port	2,000
	29	Toba Port	2,300
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	1,000
C	31	Lake Biwa (center, offshore of Karasaki)	520
Kyoto Pref.	32	Miyazu Port	830
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	1,500
Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	5,500
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	9,200
		Mouth of Riv. Yodo (Osaka City)	1,800
		Osaka Port	3,500
	_	Outside Osaka Port	3,100
Hyogo Pref.		Offshore of Himeji	620
Kobe City		Kobe Port (center)	7,000
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	140
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,300
Okayama Pref.	_	Offshore of Mizushima	130
Hiroshima Pref.	_	Kure Port	5,800
Yamaguchi Pref.	45 46	Hiroshima Bay Tokuyama Bay	980 330
ramaguem Frei.			530
	48	Offshore of Hagi	72
Tokushima Pref.		Mouth of Riv. Yoshino (Tokushima City)	63
Kagawa Pref.		Takamatsu Port	2,300
Ehime Pref.	_	Niihama Port	27
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	96
Kitakyushu City	53	Dokai Bay	12,000
Fukuoka City		Hakata Bay	860
Saga Pref.		Imari Bay	960
Nagasaki Pref.		Omura Bay	720
Oita Pref.		Mouth of Riv. Oita (Oita City)	16
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	94
Kagoshima Pref.	_	Riv. Amori (Kirishima City)	13
		Riv. Gotanda (Ichikikushikino City)	18
Okinawa Pref.	61	Naha Port	4,000
	. —		

⁽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 congeners.

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	19
Median	26
Maximum	950
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	41
	2	Tomakomai Port	29
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	7.9
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	9.3
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	5.6
Fukushima Pref.	8	Onahama Port	89
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	41
Tochigi Pref.	-	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(1.1)
Chiba Pref.		Coast of Ichihara and Anegasaki	69
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(1.4)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	130
		Mouth of Riv. Sumida (Minato Ward)	380
Yokohama City		Yokohama Port	900
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	140
N" - D C		Keihin Canal, Port of Kawasaki	950
Niigata Pref.		Lower Riv. Shinano (Niigata City)	2.5
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	14
Ishikawa Pref.	_	Mouth of Riv. Sai (Kanazawa City)	53
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(1.1)
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd 24
Nagano Pref.	_	Lake Suwa (center)	24
Shizuoka Pref.	24	Shimizu Port Volcatayla hashi Bridge Biy, Tanguy (Iyota City)	tr(2.2)
Aichi Pref.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port	22
Alcili Piel.		Nagova Port	45
Mie Pref.	_	Yokkaichi Port	88
WHE FIEL.		Toba Port	34
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	26
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	6.0
Kyoto Pref.		Miyazu Port	80
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	28
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	52
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	790
		Mouth of Riv. Yodo (Osaka City)	190
		Osaka Port	97
	38	Outside Osaka Port	88
Hyogo Pref.	39	Offshore of Himeji	16
Kobe City	40	Kobe Port (center)	49
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	35
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	31
Okayama Pref.	43	Offshore of Mizushima	7.7
Hiroshima Pref.	44	Kure Port	51
	45	Hiroshima Bay	18
Yamaguchi Pref.	46	i aya a ay	63
	47	Offshore of Ube	13
	48	Offshore of Hagi	3.3
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	2.8
Kagawa Pref.	50	Takamatsu Port	180
Ehime Pref.	_	Niihama Port	tr(1.4)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	12
Kitakyushu City	53	Dokai Bay	200
Fukuoka City		Hakata Bay	13
Saga Pref.	55	,	19
Nagasaki Pref.		Omura Bay	33
Oita Pref.		Mouth of Riv. Oita (Oita City)	tr(1.3)
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	tr(1.7)
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
01: 5 0	60	Riv. Gotanda (Ichikikushikino City)	tr(0.9)
Okinawa Pref.	61	Naha Port	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.

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

⁽Note 4) nd: Not detected

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	27
Median	38
Maximum	4,300
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	21
	2	Tomakomai Port	33
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	19
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	tr(0.7)
Akita Pref.	6	Lake Hachiro	26
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	6.2
Fukushima Pref.	8	Onahama Port	160
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	75
Tochigi Pref.	_	Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(1.3)
Chiba Pref.		Coast of Ichihara and Anegasaki	170
Chiba City		Mouth of Riv. Hanami (Chiba City)	tr(1.1)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	240
X 1 1 C'	_	Mouth of Riv. Sumida (Minato Ward)	1,300
Yokohama City	15		3,300
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	640
Niigata Duaf	_	Keihin Canal, Port of Kawasaki	4,300
Niigata Pref. Toyama Pref.		Lower Riv. Shinano (Niigata City)	5.1
•		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	24
Ishikawa Pref. Fukui Pref.	20	Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	49 nd
Yamanashi Pref.	22		nd nd
Nagano Pref.		Lake Suwa (center)	79
Shizuoka Pref.		Shimizu Port	18
Silizuoka Fiel.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	2.0
Aichi Pref.		Kinuura Port	43
Alcili I Iei.		Nagoya Port	43
Mie Pref.	28		96
which felt.		Toba Port	120
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	49
Singarien	31	Lake Biwa (center, offshore of Karasaki)	13
Kyoto Pref.	32		300
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	64
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	63
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	900
•		Mouth of Riv. Yodo (Osaka City)	140
	37		180
	38	Outside Osaka Port	110
Hyogo Pref.		Offshore of Himeji	35
Kobe City	40	Kobe Port (center)	190
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	33
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	81
Okayama Pref.	43		7.3
Hiroshima Pref.	44	Kure Port	190
	45	Hiroshima Bay	41
Yamaguchi Pref.	46		37
	47	Offshore of Ube	23
	48		3.3
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	3.1
Kagawa Pref.	50	Takamatsu Port	160
Ehime Pref.	51	Niihama Port	tr(1.3)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	6.4
Kitakyushu City	53	Dokai Bay	290
Fukuoka City	54		26
Saga Pref.	55		38
Nagasaki Pref.	56	Ÿ	54
Oita Pref.	57	Mouth of Riv. Oita (Oita City)	tr(1.4)
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	tr(0.7)
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
Oldin P. C	60	Riv. Gotanda (Ichikikushikino City)	nd 410
Okinawa Pref.	61	Naha Port	410

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

Detection frequency (sample) is based on the number of samples, 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

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	130
Median	190
Maximum	17,000
Minimum	1.2

Hokaido	Local communities	No.	Monitored sites	Measured value
Naute Pref. 3 Toyosawa Hridge, Riv. Toyosawa (Hanamaki City) 5.1	Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	
Miyagi Pref. 4 Sendai Bay (Matsushima Bay) 120 2 2 3 5 6 6 6 120 2 4 1 1 1 1 1 1 1 1 1		2		54
Sendai City	Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	5.1
Akita Pref. 6 Lake Hachiro 110 1		4		120
Yamagata Pref. Fikushtimar Perf. Fikushtimar Perf. 8 Fikushtimar Perf. 8 Fikushtimar Perf. 10 Tonckapi Pref. 10 Tonckapi Pref. 10 Tonckapi Pref. 11 Coast of Ichihara and Anegassaki 670 Chiba Pref. 11 Coast of Ichihara and Anegassaki 670 Tokyo Met. 12 Mouth of Riv. Anamin (Chiba City) 5.8 70 Nova Met. 13 Mouth of Riv. Anamin (Chiba City) 5.8 70 Nova Met. 14 Mouth of Riv. Anamin (Chiba City) 5.8 70 Nova Met. 15 Nova Met. 15 Nova Met. 16 Nova Met. 16 Nova Met. 16 Nova Met. 17 Nova Met. 18 Nova Met.	Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	12
Fukushima Pref. 8		6		110
Ibaraki Pref. 9 Tonekamome-obasi Bridge, Mouth of Riv, Tone (Kamisu City) 25			Mouth of Riv. Mogami (Sakata City)	41
Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) 25 11 Cost of Ichibara and Anegasaki 670 Chiba City 12 Mouth of Riv. Hamarui (Chiba City) 5.8 70 70 70 70 70 70 70 7				
Chiba Perf. 11 Coast of Ichibara and Anegasaki 670 Chiba City 12 Mouth of Riv. Hanami (Chiba City) 5.8 Tokyo Met. 13 Mouth of Riv. Hanami (Chiba City) 890 Yokohama City 14 Mouth of Riv. Sumida (Minato Ward) 4,660 Yokohama City 15 Yokohama Port 8,500 Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) 1,300 Nigata Pref. 18 Lower Riv. Shinano (Niigata City) 22 Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jinsu (Toyama City) 22 Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) 200 Fukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 9.5 Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Tenryu (Iwata City) 9.5 Nagono Pref. 23 Lake Suwa (center) 600 Shizuoka Pref. 24 Shimizuo Port 110 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 17 36 Lake Biwa Center, offshore of Minamihira) <td></td> <td></td> <td>` ,</td> <td></td>			` ,	
Chiba City	ŭ			
Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) 4,600 4,600 14 Mouth of Riv. Sumida (Minato Ward) 4,600 14 Mouth of Riv. Sumida (Minato Ward) 8,500 15 Vokohama City 15 Vokohama Port 8,500 17 Rehim Canal, Port of Kawasaki City 1,300 17 Rehim Canal, Port of Kawasaki City 1,300 17 Rehim Canal, Port of Kawasaki City 1,300 17 Rehim Canal, Port of Kawasaki City 22 15 Lower Riv. Shinano (Niigata City 22 15 Ishikawa Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jinsus (Toyama City) 20 20 15 Pukui Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 2,9 Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Shono (Tsuruga City) 9,5 Nagano Pref. 23 Shimzia Port 21 Lake Suwa (center) 600 5 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 17 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 17 27 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 17 28 Vokkaichi Port 28 Vokkaichi Port 29 Toba Port 200			E	
Mouth of Riv. Sumida (Minato Ward)			` ***	
Vokohama City	Tokyo Met.			
Kawasaki City	V 1 1 C'	_	, ,	
Niigata Pref. 18 Lower Riv. Shinano (Niigata City) 22				
Niigata Pref. 18	Kawasaki City		***	•
Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) 20 1 1 1 1 1 1 1 1 1	Niigata Brof		'	
Ishikawa Pref. 20 Mouth of Riv. Sai (Kanazawa City) 2.9				
Fuku Pref. 21 Mishima-bashi Bridge, Riv. Shono (Tsuruga City) 9.5				
Yamanashi Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) 9.5 Nagano Pref. 23 Lake Suwa (center) 600 Shizuoka Pref. 24 Shimizu Port 110 Shizuoka Pref. 25 Kaketsuka-bashi Bridge, Riv. Temryu (Iwata City) 17 Aichi Pref. 26 Kinuura Port 280 72 Nagoya Port 200 Mie Pref. 28 Yokkaichi Port 340 29 Toba Port 1,100 Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) 220 31 Lake Biwa (center, offshore of Karasaki) 110 Kyoto City 33 Miyamae-bashi Bridge, Riv. Chatsura (Kyoto City) 490 Osaka City 34 Mouth of Riv. Yamato (Sakai City) 3,500 Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 3,70 37 Osaka Port 30 Offshore of Himeji 1,000 Nara Pref. 40 Kobe Port (center) 2,100 Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) 7,7 Wakayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) 280 Yamaguchi Pref. 45 Hiroshima				
Nagano Pref. 23 Lake Suwa (center) 500				
Shizuoka Pref. 24 Shimizu Port 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 17 17 17 17 17 17 18 17 17				
Aichi Pref. 26 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) 17 280 280 280 27 Nagoya Port 200 200 27 Nagoya Port 29 70 29 70 70 29 70 20 20 20 20 20 20 20	Ü		,	
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60 Riv. Gotanda (Ichikikushikino City) 1.7	•		• • •	
Okinawa Pref. 61 Naha Port 950				
	Okinawa Pref.	61	Naha Port	950

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

Detection frequency (sample) is based on the number of samples, 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] Tetrachlorinated naphthalenes/sediment (pg/g-dry)

Monitored year: 2019

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

	Aggregated value
Geometric mean	230
Median	240
Maximum	26,000
Minimum	7.1

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	160
	2	Tomakomai Port	91
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	15
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	200
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	74
Akita Pref.	6	Lake Hachiro	180
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	140
Fukushima Pref.	8	Onahama Port	980
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	360
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	50
Chiba Pref.	11	Coast of Ichihara and Anegasaki	730
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	19
Tokyo Met.	13	Mouth of Riv. Arakawa (Koto Ward)	1,300
	_	Mouth of Riv. Sumida (Minato Ward)	5,400
Yokohama City	_	Yokohama Port	5,100
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	1,400
		Keihin Canal, Port of Kawasaki	26,000
Niigata Pref.		Lower Riv. Shinano (Niigata City)	44
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	120
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	330
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	11
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	23
Nagano Pref.		Lake Suwa (center)	1,000
Shizuoka Pref.	24	Shimizu Port	220
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	31
Aichi Pref.		Kinuura Port	320
) (i D)		Nagoya Port	210
Mie Pref.		Yokkaichi Port	550
CI. D. C		Toba Port	770
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	400
Kyoto Pref.		Lake Biwa (center, offshore of Karasaki) Miyazu Port	210 170
Kyoto Pier. Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	630
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	1,200
Osaka Pier. Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	3,200
Osaka City		Mouth of Riv. Yodo (Osaka City)	620
		Osaka Port	1,400
		Outside Osaka Port	1,300
Hyogo Pref.		Offshore of Himeji	240
Kobe City	40	Kobe Port (center)	3,000
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	40
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	640
Okayama Pref.		Offshore of Mizushima	49
Hiroshima Pref.		Kure Port	2,400
	45	Hiroshima Bay	430
Yamaguchi Pref.	46		86
	47	Offshore of Ube	230
	48	Offshore of Hagi	32
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	31
Kagawa Pref.	50	Takamatsu Port	770
Ehime Pref.	51	Niihama Port	9.1
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	40
Kitakyushu City	53	Dokai Bay	7,000
Fukuoka City		Hakata Bay	370
Saga Pref.		Imari Bay	350
Nagasaki Pref.		ý.	240
Oita Pref.		Mouth of Riv. Oita (Oita City)	7.1
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	58
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	7.9
		Riv. Gotanda (Ichikikushikino City)	9.6
Okinawa Pref.	61	Naha Port	1,400

⁽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.

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	110
Median	130
Maximum	6,800
Minimum	3.3

Hokkaido Iwate Pref. Miyagi Pref. Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref.	2 3 4 5 6 7 8 9	Monitored sites Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City) Tomakomai Port Toyosawa Bridge, Riv. Toyosawa (Hanamaki City) Sendai Bay (Matsushima Bay) Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Lake Hachiro	Measured value 79 44 5.9 130 47
Iwate Pref. Miyagi Pref. Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref.	2 3 4 5 6 7 8 9	Tomakomai Port Toyosawa Bridge, Riv. Toyosawa (Hanamaki City) Sendai Bay (Matsushima Bay) Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Lake Hachiro	44 5.9 130 47
Miyagi Pref. Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref.	3 4 5 6 7 8 9	Sendai Bay (Matsushima Bay) Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Lake Hachiro	5.9 130 47
Miyagi Pref. Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref.	4 5 6 7 8 9	Sendai Bay (Matsushima Bay) Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Lake Hachiro	130 47
Sendai City Akita Pref. Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref.	5 6 7 8 9	Hirose-ohashi Bridge, Riv. Hirose (Sendai City) Lake Hachiro	47
Yamagata Pref. Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref.	7 8 9		
Fukushima Pref. Ibaraki Pref. Tochigi Pref. Chiba Pref.	8 9		82
Ibaraki Pref. Tochigi Pref. Chiba Pref.	8 9	Mouth of Riv. Mogami (Sakata City)	76
Tochigi Pref. Chiba Pref.		Onahama Port	510
Chiba Pref.	10	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	250
		Tagawa Kyubun Area Head Works (Utsunomiya City)	19
C1 '' C'	11	Coast of Ichihara and Anegasaki	400
	12	Mouth of Riv. Hanami (Chiba City)	13
. ,		Mouth of Riv. Arakawa (Koto Ward)	680
		Mouth of Riv. Sumida (Minato Ward)	2,400
		Yokohama Port	3,300
_		Mouth of Riv. Tama (Kawasaki City)	850
		Keihin Canal, Port of Kawasaki	6,800
		Lower Riv. Shinano (Niigata City)	19
		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	58
		Mouth of Riv. Sai (Kanazawa City)	160
		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	3.3
		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	13
		Lake Suwa (center)	490
_		Shimizu Port	130
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	8.7
l	_	Kinuura Port Nagova Port	150
		Yokkaichi Port	97 390
l —		Toba Port	200
		Lake Biwa (center, offshore of Minamihira)	240
		Lake Biwa (center, offshore of Karasaki)	130
		Miyazu Port	70
		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	220
		Mouth of Riv. Yamato (Sakai City)	610
		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	1,800
_		Mouth of Riv. Yodo (Osaka City)	330
l —		Osaka Port	680
	38	Outside Osaka Port	760
Hyogo Pref.	39	Offshore of Himeji	120
Kobe City	40	Kobe Port (center)	1,200
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	22
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	250
Okayama Pref.	43	Offshore of Mizushima	22
		Kure Port	1,100
		Hiroshima Bay	200
		yy	50
		Offshore of Ube	96
		Offshore of Hagi	12
		Mouth of Riv. Yoshino (Tokushima City)	9.5
		Takamatsu Port	580
		Niihama Port Mouth of Div. Shimonto (Shimonto City)	5.2
		Mouth of Riv. Shimanto (Shimanto City) Dokai Bay	18
		Hakata Bay	1,600 180
		Imari Bay	240
			160
		Mouth of Riv. Oita (Oita City)	4.0
		Mouth of Riv. Oydo (Miyazaki City)	26
		Riv. Amori (Kirishima City)	3.8
_		Riv. Gotanda (Ichikikushikino City)	5.2
		Naha Port	800

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

Detection frequency (sample) is based on the number of samples, 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] Hexachlorinated naphthalenes/sediment (pg/g-dry)

Monitored year: 2019

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

	Aggregated value
Geometric mean	22
Median	34
Maximum	2,300
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	10
	2	Tomakomai Port	11
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(0.3)
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	53
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	7.6
Akita Pref.	6	Lake Hachiro	21
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	11
Fukushima Pref.	8	Onahama Port	210
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	210
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	2.1
Chiba Pref.		Coast of Ichihara and Anegasaki	140
Chiba City		Mouth of Riv. Hanami (Chiba City)	2.6
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	250
		Mouth of Riv. Sumida (Minato Ward)	680
Yokohama City		Yokohama Port	2,100
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	240
		Keihin Canal, Port of Kawasaki	2,300
Niigata Pref.		Lower Riv. Shinano (Niigata City)	2.3
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	14
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	29
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	1.7
Nagano Pref.		Lake Suwa (center)	84
Shizuoka Pref.	24	Shimizu Port	37
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	1.0
Aichi Pref.		Kinuura Port	35
M. D. C	_	Nagoya Port	32
Mie Pref.		Yokkaichi Port	420
CI. D. C	_	Toba Port	41
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	66
Kyoto Pref.		Lake Biwa (center, offshore of Karasaki) Miyazu Port	38 20
Kyoto City	_	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	34
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	100
Osaka Fier.		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	490
Osaka City		Mouth of Riv. Yodo (Osaka City)	120
		Osaka Port	130
	38	Outside Osaka Port	150
Hyogo Pref.		Offshore of Himeji	28
Kobe City		Kobe Port (center)	360
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	3.3
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	39
Okayama Pref.	43	Offshore of Mizushima	6.6
Hiroshima Pref.		Kure Port	280
1111 0511111111 1 1 1 1 1 1	45	Hiroshima Bay	42
Yamaguchi Pref.	46		24
	47	Offshore of Ube	26
		Offshore of Hagi	2.5
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	tr(0.7)
Kagawa Pref.	50		70
Ehime Pref.	_	Niihama Port	1.7
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	2.3
Kitakyushu City	53	Dokai Bay	740
Fukuoka City		Hakata Bay	38
Saga Pref.	55		40
Nagasaki Pref.	_	Omura Bay	23
Oita Pref.	_	Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	140

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

Detection frequency (sample) is based on the number of samples, 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

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	4.4
Median	5.2
Maximum	610
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.9
	2	Tomakomai Port	3.4
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	13
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	0.6
Akita Pref.	6	Lake Hachiro	5.9
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	2.0
Fukushima Pref.	8	Onahama Port	97
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	89
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(0.3)
Chiba Pref.		Coast of Ichihara and Anegasaki	38
Chiba City		Mouth of Riv. Hanami (Chiba City)	0.5
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	69
		Mouth of Riv. Sumida (Minato Ward)	110
Yokohama City		Yokohama Port	460
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	59
		Keihin Canal, Port of Kawasaki	610
Niigata Pref.		Lower Riv. Shinano (Niigata City)	0.4
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	3.9
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	4.1
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	0.4
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	tr(0.1)
Nagano Pref.	_	Lake Suwa (center)	11
Shizuoka Pref.	24	Shimizu Port	5.2
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	tr(0.1)
Aichi Pref.		Kinuura Port	3.0
		Nagoya Port	3.5
Mie Pref.		Yokkaichi Port	130
G1: D 0	_	Toba Port	4.1
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	18
T . D .C	_	Lake Biwa (center, offshore of Karasaki)	6.9
Kyoto Pref.	_	Miyazu Port	2.7
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	2.2
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	14
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	64
		Mouth of Riv. Yodo (Osaka City) Osaka Port	25
			20
H Df	38	Outside Osaka Port	22
Hyogo Pref.		Offshore of Himeji Kobe Port (center)	6.3
Kobe City Nara Pref.			59
	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	0.5 4.3
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) Offshore of Mizushima	
Okayama Pref. Hiroshima Pref.	43	Kure Port	2.0
nirosiiiiia Piei.			64
Yamaguchi Pref.	45 46	Hiroshima Bay Tokuyama Bay	7.3 8.3
i amaguciii Fiel.	46	Offshore of Ube	7.2
		Offshore of Hagi	0.6
Tokushima Pref.	48	Mouth of Riv. Yoshino (Tokushima City)	tr(0.3)
Kagawa Pref.	50	Takamatsu Port	7.3
Ehime Pref.	_	Niihama Port	1.7
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	0.4
Kitakyushu City	53	Dokai Bay	250
Fukuoka City		Hakata Bay	8.0
Saga Pref.	55		7.4
Nagasaki Pref.	_	Omura Bay	4.0
Oita Pref.	_	Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
ragosinila i ici.	60	Riv. Gotanda (Ichikikushikino City)	tr(0.1)
Okinawa Pref.	61	Naha Port	10
Omnawa 1 ICI.	0.1	12 (min 2 02)	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.

⁽Note 4) nd: Not detected

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

Monitored year: 2019

Detection Frequency (site): 43/61 (Missing value: 0) Detection Frequency (sample): 43/61 (Missing value: 0)

	Aggregated value
Geometric mean	1.4
Median	1.3
Maximum	180
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1.3
	2	Tomakomai Port	0.8
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	2.4
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	2.4
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	1.3
Fukushima Pref.	8	Onahama Port	66
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	11
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	24
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	9.1
V 1 1 C'	_	Mouth of Riv. Sumida (Minato Ward)	22
Yokohama City		Yokohama Port	180
Kawasaki City		Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	23
Niigata Prof			130 nd
Niigata Pref. Toyama Pref.		Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	1.8
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	1.3
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	2.8
Shizuoka Pref.		Shimizu Port	1.1
Silizuoka 1 ici.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	nd
THOM THOS.		Nagoya Port	1.1
Mie Pref.		Yokkaichi Port	27
		Toba Port	1.3
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	3.3
<i>8</i>		Lake Biwa (center, offshore of Karasaki)	1.4
Kyoto Pref.		Miyazu Port	1.0
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	tr(0.4)
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	3.5
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	13
	36	Mouth of Riv. Yodo (Osaka City)	4.9
		Osaka Port	4.6
	_	Outside Osaka Port	6.2
Hyogo Pref.		Offshore of Himeji	1.5
Kobe City		Kobe Port (center)	12
Nara Pref.	_	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	_	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	0.8
Okayama Pref.		Offshore of Mizushima	1.0
Hiroshima Pref.	_	Kure Port	24
V 1'B C	45	Hiroshima Bay	2.1
Yamaguchi Pref.	46		3.0
	47		4.7
Tokushima Pref.	48	Offshore of Hagi Mouth of Riv. Yoshino (Tokushima City)	nd nd
Kagawa Pref.		Takamatsu Port	nd 2.3
Ehime Pref.		Niihama Port	2.3
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	34
Fukuoka City		Hakata Bay	1.9
Saga Pref.		Imari Bay	1.2
Nagasaki Pref.		Omura Bay	1.8
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	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

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

Monitored year: 2019

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

Detection limit: *3 Quantification limit: *8

	Aggregated value
Geometric mean	300
Median	390
Maximum	6,300
Minimum	tr(7)

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1,700
	2	Tomakomai Port	180
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	100
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	390
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	34
Akita Pref.	6	Lake Hachiro	750
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	470
Fukushima Pref.	8	Onahama Port	1,600
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	590
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	61
Chiba Pref.	11		1,300
Chiba City		Mouth of Riv. Hanami (Chiba City)	18
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	2,800
V-1-1	14	Mouth of Riv. Sumida (Minato Ward) Yokohama Port	2,400
Yokohama City Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	990 310
Kawasaki City	17		1,500
Niigata Pref.	_	Lower Riv. Shinano (Niigata City)	94
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	190
Ishikawa Pref.	20	Mouth of Riv. Sai (Kanazawa City)	310
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(7)
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	40
Nagano Pref.		Lake Suwa (center)	1,400
Shizuoka Pref.		Shimizu Port	190
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	96
Aichi Pref.		Kinuura Port	1,600
	27	Nagoya Port	810
Mie Pref.	28	Yokkaichi Port	3,000
	29	Toba Port	650
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	1,500
-	31	Lake Biwa (center, offshore of Karasaki)	390
Kyoto Pref.	32		170
Kyoto City	33		140
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	700
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	6,300
		Mouth of Riv. Yodo (Osaka City)	1,400
		Osaka Port	2,300
II D C	38		1,600
Hyogo Pref.	39	Offshore of Himeji Kobe Port (center)	350
Kobe City		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	1,200
Nara Pref. Wakayama Pref.	42		50 1,200
Okayama Pref.		Offshore of Mizushima	94
Hiroshima Pref.		Kure Port	490
Timosinina Tier.	45	Hiroshima Bay	650
Yamaguchi Pref.		Tokuyama Bay	100
		Offshore of Ube	88
	48		71
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	25
Kagawa Pref.	50	Takamatsu Port	560
Ehime Pref.	51		11
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	400
Kitakyushu City	53	Dokai Bay	1,100
Fukuoka City		Hakata Bay	160
Saga Pref.	55		700
Nagasaki Pref.		Omura Bay	130
Oita Pref.	57	\ 2/	9
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	120
Kagoshima Pref.	59		10
Oldings D. C	60	Riv. Gotanda (Ichikikushikino City)	21
Okinawa Pref.	61	Naha Port	2,400

⁽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.

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

⁽Note 4) *: Indicates the sum value of the Quantification [Detection] limits of each target chemicals. 10-2-57

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	260
Median	380
Maximum	6,200
Minimum	7

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	1,600
	2	Tomakomai Port	170
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	86
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	390
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	20
Akita Pref.	6	Lake Hachiro	740
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	430
Fukushima Pref.	8	Onahama Port	1,500
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	570
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	41
Chiba Pref.		Coast of Ichihara and Anegasaki	1,300
Chiba City		Mouth of Riv. Hanami (Chiba City)	17
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward) Mouth of Riv. Sumida (Minato Ward)	2,700 2,300
Yokohama City		Yokohama Port	970
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	270
Kawasaki City		Keihin Canal, Port of Kawasaki	1,500
Niigata Pref.		Lower Riv. Shinano (Niigata City)	80
Tovama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	180
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	310
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	7
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Shoho (Tsutuga City)	37
Nagano Pref.		Lake Suwa (center)	1,400
Shizuoka Pref.		Shimizu Port	180
Simbuona 11011		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	37
Aichi Pref.		Kinuura Port	1,600
		Nagoya Port	800
Mie Pref.		Yokkaichi Port	3,000
	29	Toba Port	640
Shiga Pref.	30	Lake Biwa (center, offshore of Minamihira)	1,500
	31	Lake Biwa (center, offshore of Karasaki)	380
Kyoto Pref.		Miyazu Port	160
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	80
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	670
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	6,200
		Mouth of Riv. Yodo (Osaka City)	1,400
		Osaka Port	2,200
** 5 0		Outside Osaka Port	1,600
Hyogo Pref.		Offshore of Himeji	340
Kobe City		Kobe Port (center)	1,200
Nara Pref. Wakayama Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	45
,		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	1,100
Okayama Pref.		Offshore of Mizushima Kure Port	88
Hiroshima Pref.	45	Hiroshima Bay	470 640
Yamaguchi Pref.	45		99
ramagaciii i ici.	47		79
	48		51
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	17
Kagawa Pref.	-	Takamatsu Port	540
Ehime Pref.		Niihama Port	10
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	340
Kitakyushu City	53	Dokai Bay	1,100
Fukuoka City	54	Hakata Bay	150
Saga Pref.		Imari Bay	680
Nagasaki Pref.	56	Omura Bay	120
Oita Pref.		Mouth of Riv. Oita (Oita City)	7
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	33
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	9
	60	Riv. Gotanda (Ichikikushikino City)	20
Okinawa Pref.	61	Naha Port	2,400

⁽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.

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

Monitored year: 2019

Detection Frequency (site): 60/61 (Missing value: 0)
Detection Frequency (sample): 60/61 (Missing value: 0)

	Aggregated value
Geometric mean	14
Median	15
Maximum	140
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	140
Trommando	2	Tomakomai Port	13
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	16
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	4.3
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	14
Akita Pref.	6	Lake Hachiro	13
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	42
Fukushima Pref.	8	Onahama Port	62
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	18
Tochigi Pref.	10	Tagawa Kyubun Area Head Works (Utsunomiya City)	20
Chiba Pref.	11	Coast of Ichihara and Anegasaki	28
Chiba City	12	Mouth of Riv. Hanami (Chiba City)	tr(1.2)
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	57
	_	Mouth of Riv. Sumida (Minato Ward)	53
Yokohama City		Yokohama Port	16
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	41
		Keihin Canal, Port of Kawasaki	31
Niigata Pref.		Lower Riv. Shinano (Niigata City)	14
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	11
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	4.9
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	_	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	2.6
Nagano Pref.		Lake Suwa (center)	22
Shizuoka Pref.		Shimizu Port	8.7
		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	59
Aichi Pref.		Kinuura Port	17
Mr. D. C		Nagoya Port	12
Mie Pref.		Yokkaichi Port	35
CI. D. C		Toba Port	7.9
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	44
Kyoto Pref.		Lake Biwa (center, offshore of Karasaki) Miyazu Port	5.5
Kyoto Pier. Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	6.2
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	29
Osaka Pier. Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	51
Osaka City		Mouth of Riv. Yodo (Osaka City)	15
		Osaka Port	92
		Outside Osaka Port	44
Hyogo Pref.	_	Offshore of Himeji	13
Kobe City		Kobe Port (center)	13
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	5.0
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	110
Okayama Pref.		Offshore of Mizushima	6.1
Hiroshima Pref.		Kure Port	21
	45	Hiroshima Bay	7.7
Yamaguchi Pref.	46	Tokuyama Bay	2.1
	47		8.5
	48	Offshore of Hagi	20
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	7.6
Kagawa Pref.	50	Takamatsu Port	15
Ehime Pref.		Niihama Port	tr(1.0)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	57
Kitakyushu City	53	Dokai Bay	25
Fukuoka City		Hakata Bay	6.5
Saga Pref.		Imari Bay	15
Nagasaki Pref.		Omura Bay	7.6
Oita Pref.		Mouth of Riv. Oita (Oita City)	2.1
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	87
Kagoshima Pref.		Riv. Amori (Kirishima City)	tr(0.9)
		Riv. Gotanda (Ichikikushikino City)	tr(1.0)
Okinawa Pref.	61	Naha Port	13

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

Detection frequency (sample) is based on the number of samples, 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

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

Monitored year: 2019

Detection Frequency (site): 23/61 (Missing value: 0)
Detection Frequency (sample): 23/61 (Missing value: 0)

Detection limit: *4,000 Quantification limit: *8,000

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	150,000
Minimum	nd

Hokaido	Local communities	No.	Monitored sites	Measured value
Jovane Pref. 3 Tovosawa Bridge, Riv. Toyosawa (Hanamaki City) nd Nayari Pref. 4 Senda Bry (Mastashim Bay) nd Akiia Pref. 6 Lake Hachiro nd Akiia Pref. 6 Lake Hachiro nd Akiia Pref. 6 Lake Hachiro nd Akiia Pref. 7 Mouth of Riv. Mogami (Sakata City) nd nd Akiia Pref. 7 Tonchama Port 11,000 nd 11,000 nd	Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
Miyagi Pref. 4 Sendai Bay (Matsushima Bay) nd sendai City 5 Hirose-Obashi Bridge, Riv. Hirose (Sendai City) nd Akita Pref. 7 Mouth of Riv. Mogami (Sakata City) nd nd Varinggan Pref. 7 Mouth of Riv. Mogami (Sakata City) nd nd Varinggan Pref. 7 Mouth of Riv. Mogami (Sakata City) nd nd Varinggan Pref. 7 Tochigi Pref. 7 Tochigi Pref. 9 Toneckamome-chasi Bridge, Mouth of Riv. Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Usunomiya City) nd nd Chiba City nd Nd Varinggan Pref. 11 Cosst of Ichibara and Anegasaki 10,000 nd Nd Varinggan Pref. 12 Mouth of Riv. Arnakwa (Koto Ward) nd 20,000 Nd Nd Nd Nd Nd Nd Nd		2		tr(6,600)
Sendai City		3		nd
Akita Pref. 6 Lake Hachiro nd Namagani Pref. 7 Mouth of Riv. Mogami (Sakata City) nd		4		nd
Mouth of Riv. Mogami (Sakana City)	,	5		
Fukushima Pref. 8		_		
Ibbrarki Pref. 9 Tonekamome-obasi Bridge, Mouth of Riv. Tone (Kamisu City) nd		 		
Tochigi Pref. 10 Tagawa Kyubun Area Head Works (Utsunomiya City) nd 10,000				
Chiba Peref. 11 Coast of Ichibara and Anegasaki 10,000 Chiba City 12 Mouth of Riv. Hanami (Chiba City) nd Tokyo Met. 13 Mouth of Riv. Arakawa (Koto Ward) ad 4 Mouth of Riv. Sunida (Minato Ward) 26,000 Yokohama City 15 Yokohama Port ut7,500) Kawasaki City 16 Mouth of Riv. Tama (Kawasaki City) ut7,500) Nigata Pref. 18 Lower Riv. Shinano (Niigata City) nd Toyama Perf. 19 Hagium-abashi Bridge, Mouth of Riv. Jinsu (Toyama City) nd Huku Perf. 21 Mishima-bashi Bridge, Mouth of Riv. Janua (Kofu City) nd Amanashi Pref. 22 Senshu-bashi Bridge, Riv. Shooo (Tsuruga City) nd Magano Pref. 21 Mishima-bashi Bridge, Riv. Shooo (Tsuruga City) nd Shizuoka Pref. 22 Senshu-bashi Bridge, Riv. Arakawa (Kofu City) nd Majura Port 23 Lake Biwa (center, of Shore of Minamihira) nd Mie Pref. 28 Yokakichi Port nd Mie Pref.				
Chiba City				
Tokyo Met.			č	
Hagura of Riv. Sumida (Minato Ward) 26,000	•			
Vokohama Port	Tokyo Met.	_		
Kawasaki City	Volcahama City		,	·
Niigata Pref. 18 Lower Riv. Shinano (Niigata City)		_		\
Niigata Pref. 18	Kawasaki City			. , ,
Toyama Pref. 19 Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) nd	Niigata Prof	_	,	
Ishikawa Pref. 20 Mouth or Riv. Sai (Kanazawa City)				
Fuku 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) 9,400 Shizuoka Pref. 24 Shimizuo Port nd Aichi Pref. 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) nd Aichi Pref. 26 Kinuura Port nd Mie Pref. 28 Yokkaichi Port nd 27 Nagoya Port nd Mie Pref. 28 Yokkaichi Port 19,000 29 Toba Port 9,000 Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) nd Kyoto Pref. 32 Miyamae-bashi Bridge, Riv. Chatsura (Kyoto City) nd Osaka City 33 Miyamae-bashi Bridge, Riv. Chawa (Osaka City) 19,000 Osaka City 34 Kouth of Riv. Yamato (Sakai City) 150,000 37 Osaka Port 38 Outside Osaka Port 36,000 38 Outside Osaka Port 36,000 39 Offshore of Himeji tr(5,100) Nara Pref. 40 Kobe Port (center) 13,000 Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) nd Hiroshima Pref. <				
Nagano Pref. 23 Lake Suwa (center) 9,400		1		
Shizuoka Pref. 24 Shimizu Port 25 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) nd				
Aichi Pref. 26 Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) nd			,	,
Aichi Pref. 26 Kinuura Port nd Mie Pref. 27 Nagoya Port nd Mie Pref. 28 Yokaichi Port trt7,400) 29 Toba Port 9,000 Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) nd Kyoto Pref. 32 Miyama-bashi Bridge, Riv. Katsura (Kyoto City) nd Kyoto City 33 Miyama-bashi Bridge, Riv. Katsura (Kyoto City) nd Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) nd 36 Mouth of Riv. Yamato (Sakai City) nd 37 Osaka Port 12,000 38 Mouth of Riv. Yodo (Osaka City) nd 39 Ottade Osaka Port 12,000 30 Osaka Port 12,000 Kobe City 40 Kobe Port (center) Nara Pref. 41 Taisho-bashi Bridge, Riv. Yamato (Oji Town) nd Makayama Pref. 42 Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City) nd Hiroshima Pref. 44 Kure	Silizuoka 1 ici.			
Mile Pref. 28 Nagoya Port	Aichi Pref		, , , , , , , , , , , , , , , , , , ,	
Mie Pref. 28 Yokkaichi Port	THOM THOS.			
Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) nd	Mie Pref.	_		
Shiga Pref. 30 Lake Biwa (center, offshore of Minamihira) nd				
Syoto Pref. 32 Miyazu Port nd	Shiga Pref.	_		
Kyoto Pref. 32 Miyazu Port nd Kyoto City 33 Miyazu Port nd Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 19,000 Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 150,000 36 Mouth of Riv. Yodo (Osaka City) nd 37 Osaka Port 36,000 Hyogo Pref. 39 Offshore of Himeji tr(5,100) Kobe City 40 Kobe Port (center) 13,000 Nara Pref. 41 Taisho-bashi Bridge, 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(7,700) Yamaguchi Pref. 45 Hiroshima Bay tr(5,200) Yamaguchi Pref. 46 Tokuyama Bay 11,000 Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) nd Kagawa Pref. 50 Nauth of	Ç			nd
Osaka Pref. 34 Mouth of Riv. Yamato (Sakai City) 19,000 Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 150,000 36 Mouth of Riv. Yodo (Osaka City) nd 37 Osaka Port 12,000 38 Outside Osaka Port 36,000 Hyogo Pref. 39 Offshore of Himeji tr(5,100) Kobe City 40 Kobe Port (center) 13,000 Nara Pref. 41 Taisho-bashi Bridge, 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(7,700) 45 Hiroshima Bay tr(5,200) Yamaguchi Pref. 46 Tokuyama Bay 11,000 47 Offshore of Hagi nd Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) nd Kagawa Pref. 50 Takamatsu Port nd Kochi Pref. 51 Niihama Port nd Kochi Pref. 52 Mouth of Riv. Shimanto (Shimanto City) nd Kitakyushu City 54 Hakata Bay	Kyoto Pref.	32		nd
Osaka City 35 Kema-bashi Bridge, Riv. Oh-kawa (Osaka City) 150,000 36 Mouth of Riv. Yodo (Osaka City) nd 37 Osaka Port 36,000 Hyogo Pref. 39 Offshore of Himeji tr(5,100) Kobe City 40 Kobe Port (center) 13,000 Nara Pref. 41 Taisho-bashi Bridge, 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(7,700) 45 Tokuyama Bay tr(5,200) Yamaguchi Pref. 45 Tokuyama Bay tr(5,200) Yamaguchi Pref. 46 Tokuyama Bay 11,000 Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) nd Kagawa Pref. 50 Takamatsu Port nd Kochi Pref. 51 Niihama Port nd Kitakyushu City 53 Dokai Bay tr(6,800) </td <td>Kyoto City</td> <td>33</td> <td>Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)</td> <td>nd</td>	Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Mouth of Riv. Yodo (Osaka City)	Osaka Pref.	34	Mouth of Riv. Yamato (Sakai City)	19,000
37 Osaka Port 32,000 36,000 3	Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	150,000
38 Outside Osaka Port 36,000		36	Mouth of Riv. Yodo (Osaka City)	nd
Hyogo Pref. 39 Offshore of Himeji tr(5,100) Kobe City 40 Kobe Port (center) 13,000 Nara Pref. 41 Taisho-bashi Bridge, 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(7,700) Yamaguchi Pref. 45 Tokuyama Bay 11,000 Yamaguchi Pref. 46 Tokuyama Bay 11,000 Yamaguchi Pref. 46 Tokuyama Bay nd Tokushima Pref. 49 Mouth of Riv. Yoshino (Tokushima City) nd Kagawa Pref. 50 Takamatsu Port nd Kochi Pref. 51 Niihama Port nd Kitakyushu City 53 Dokai Bay tr(6,800) Fukuoka City 54 Hakata Bay nd Nagasaki Pref. 55 Imari Bay tr(7,900) Nagasaki Pref. 56 Omura Bay </td <td></td> <td>37</td> <td></td> <td>12,000</td>		37		12,000
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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(7,700) 45 Hiroshima Bay tr(5,200) Yamaguchi Pref. 46 Tokuyama Bay 11,000 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 tr(6,800) Fukuoka City 54 Hakata Bay nd Saga Pref. 55 Imari Bay nd Nagasaki Pref. 56 Omura Bay nd Oita Pref. 58 Mouth of Riv. Oyodo (Miyazaki City) nd Miyazaki Pref. 58		40		13,000
Okayama Pref. 43 Offshore of Mizushima nd Hiroshima Pref. 44 Kure Port tr(7,700) 45 Hiroshima Bay tr(5,200) Yamaguchi Pref. 46 Tokuyama Bay 11,000 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 tr(6,800) Fukuoka City 54 Hakata Bay nd Saga Pref. 55 Imari Bay tr(7,900) 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		-		
Hiroshima Pref. 44 Kure Port tr(7,700) 45 Hiroshima Bay tr(5,200) Yamaguchi Pref. 46 Tokuyama Bay 11,000 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 tr(6,800) Fukuoka City 54 Hakata Bay nd Nagasaki Pref. 55 Imari Bay tr(7,900) 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	-			nd
45 Hiroshima Bay tr(5,200) Yamaguchi Pref. 46 Tokuyama Bay 11,000 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 tr(6,800) Fukuoka City 54 Hakata Bay nd Nagasaki Pref. 55 Imari Bay tr(7,900) 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				
Yamaguchi Pref. 46 Tokuyama Bay 11,000 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 tr(6,800) Fukuoka City 54 Hakata Bay nd Nagasaki Pref. 55 Imari Bay tr(7,900) 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	Hiroshima Pref.			
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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 tr(6,800) Fukuoka City 54 Hakata Bay nd Saga Pref. 55 Imari Bay tr(7,900) 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	Yamaguchi Pref.	_	· ·	
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Kitakyushu City 53 Dokai Bay tr(6,800) Fukuoka City 54 Hakata Bay nd Saga Pref. 55 Imari Bay tr(7,900) 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				
Fukuoka City 54 Hakata Bay nd Saga Pref. 55 Imari Bay tr(7,900) 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			1/	
Saga Pref. 55 Imari Bay tr(7,900) 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				
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		+		
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		+	,	
Miyazaki Pref.58Mouth of Riv. Oyodo (Miyazaki City)ndKagoshima Pref.59Riv. Amori (Kirishima City)nd60Riv. Gotanda (Ichikikushikino City)nd			·	
Kagoshima Pref.59Riv. Amori (Kirishima City)nd60Riv. Gotanda (Ichikikushikino City)nd				
60 Riv. Gotanda (Ichikikushikino City) nd	•	-		
	Okinawa 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) 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] 10-2-60 each congeners.

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

Monitored year: 2019

Detection Frequency (site): 8/61 (Missing value: 0)
Detection Frequency (sample): 8/61 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	2,600
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	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	nd
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	nd
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	tr(1,400)
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.	_	Mouth of Riv. Arakawa (Koto Ward)	nd
77 1 1 G':		Mouth of Riv. Sumida (Minato Ward)	tr(1,100)
Yokohama City		Yokohama Port	nd
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	nd
N" , D C		Keihin Canal, Port of Kawasaki	nd
Niigata Pref. Tovama Pref.		Lower Riv. Shinano (Niigata City)	nd
- J		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref. Fukui Pref.		Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
	21		nd
Yamanashi Pref. Nagano Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City) Lake Suwa (center)	nd +=(1,100)
Shizuoka Pref.	24	Shimizu Port	tr(1,100)
Silizuoka Piei.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	nd
Alcili Fiel.		Nagova Port	nd
Mie Pref.		Yokkaichi Port	tr(1,500)
WHE I ICI.		Toba Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	nd
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	_	Miyazu Port	nd
Kyoto City	_	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	2,300
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	2,500
		Mouth of Riv. Yodo (Osaka City)	nd
		Osaka Port	nd
	38	Outside Osaka Port	2,600
Hyogo Pref.	39	Offshore of Himeji	nd
Kobe City	40	Kobe Port (center)	nd
Nara Pref.	41	Taisho-bashi Bridge, 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	i aya a ay	nd
	47	Offshore of Ube	nd
	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50		nd
Ehime Pref.		Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	nd
Fukuoka City		Hakata Bay	nd
Saga Pref.	55	,	nd
Nagasaki Pref.	_	Omura Bay	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
~	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	tr(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.

⁽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: 2019

Detection Frequency (site): 22/61 (Missing value: 0)
Detection Frequency (sample): 22/61 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	5,900
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	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	nd
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	tr(1,500)
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	_	Coast of Ichihara and Anegasaki	tr(1,800)
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	tr(1,000)
V 1 1 C'		Mouth of Riv. Sumida (Minato Ward)	4,600
Yokohama City Kawasaki City	_	Yokohama Port	tr(1,700)
Kawasaki City		Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	tr(1,300)
Niigata Brof	_	,	2,200 nd
Niigata Pref. Toyama Pref.		Lower Riv. Shinano (Niigata City) Hagiura bashi Bridga Mouth of Riv. Linten (Toyama City)	nd
Ishikawa Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City) Mouth of Riv. Sai (Kanazawa City)	nd nd
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	2,400
Shizuoka Pref.		Shimizu Port	2,400 nd
Silizuoka 1 lei.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	nd
Auciii i ici.		Nagoya Port	nd
Mie Pref.		Yokkaichi Port	tr(1,200)
		Toba Port	nd
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	nd
<i>G</i>		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	4,800
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	5,900
	36	Mouth of Riv. Yodo (Osaka City)	nd
		Osaka Port	3,300
	_	Outside Osaka Port	4,900
Hyogo Pref.		Offshore of Himeji	tr(1,600)
Kobe City		Kobe Port (center)	3,000
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.		Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.		Offshore of Mizushima	nd
Hiroshima Pref.		Kure Port	2,000
	45	Hiroshima Bay	tr(1,100)
Yamaguchi Pref.	46	i aya a ay	tr(1,200)
	47		nd
Tokushima Pref.	48	Offshore of Hagi	nd
Kagawa Pref.	49	Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port	nd 2 200
Ehime Pref.	51	Niihama Port	2,200 nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	2,800
Fukuoka City		Hakata Bay	2,800 nd
Saga Pref.		Imari Bay	tr(1,100)
Nagasaki Pref.		Omura Bay	nd
Oita Pref.		Mouth of Riv. Oita (Oita City)	nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.		Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	tr(1,300)
	·	!	-\-,-,/

⁽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.

⁽Note 4) nd: Not detected

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

Monitored year: 2019

Detection Frequency (site): 27/61 (Missing value: 0)
Detection Frequency (sample): 27/61 (Missing value: 0)

	Aggregated value
Geometric mean	tr(1,100)
Median	nd
Maximum	83,000
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	nd
	2	Tomakomai Port	2,500
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	nd
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	2,700
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	3,400
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
		Mouth of Riv. Sumida (Minato Ward)	5,600
Yokohama City	15		tr(1,200)
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	tr(1,900)
	_	Keihin Canal, Port of Kawasaki	2,300
Niigata Pref.		Lower Riv. Shinano (Niigata City)	nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.	22	8,	nd
Nagano Pref.	-	Lake Suwa (center)	tr(1,800)
Shizuoka Pref.	24		tr(1,500)
	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	nd
		Nagoya Port	tr(1,300)
Mie Pref.	28		2,200
	_	Toba Port	3,100
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	nd
T D. C	31	Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.	32	Miyazu Port	nd
Kyoto City		Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd 4.700
Osaka Pref.	34		4,700
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	83,000
	37	Mouth of Riv. Yodo (Osaka City) Osaka Port	nd 4,100
	38		12,000
Hyogo Pref.		Offshore of Himeji	tr(1,700)
Kobe City		Kobe Port (center)	4,200
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	4,200 nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	43		tr(1,100)
Hiroshima Pref.		Kure Port	tr(1,000)
Tili Osiililia Tiet.	45	Hiroshima Bay	tr(1,800)
Yamaguchi Pref.	46	 	5,100
i amagaciii i ici.	47	Offshore of Ube	tr(1,300)
	48		nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50	Takamatsu Port	3,300
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	·	tr(1,100)
Saga Pref.	55		3,000
Nagasaki Pref.	56	 	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
124505111114 1 101.	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	6,100
O		- ·	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.

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

⁽Note 4) nd: Not detected

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	tr(1,700)
Median	tr(1,700)
Maximum	60,000
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	tr(1,700)
	2	Tomakomai Port	4,100
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	tr(1,700)
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(1,600)
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	tr(1,400)
Fukushima Pref.	8	Onahama Port	7,000
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	nd
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.	_	Coast of Ichihara and Anegasaki	3,500
Chiba City	_	Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	2,900
V 1 1 C'		Mouth of Riv. Sumida (Minato Ward)	15,000
Yokohama City	_	Yokohama Port	4,900
Kawasaki City		Mouth of Riv. Tama (Kawasaki City) Keihin Canal, Port of Kawasaki	4,300 4,800
Niigata Brof	_	,	4,800 nd
Niigata Pref. Tovama Pref.		Lower Riv. Shinano (Niigata City) Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	nd
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	tr(1,800)
Fukui Pref.		Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd
Yamanashi Pref.		Senshu-bashi Bridge, Riv. Shoho (Tsutuga City) Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	4,100
Shizuoka Pref.		Shimizu Port	2,400
Silizuoka 1 ici.		Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	tr(1,500)
THEM TIES.		Nagoya Port	2,000
Mie Pref.		Yokkaichi Port	2,500
		Toba Port	5,900
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	tr(1,500)
<i>G</i>		Lake Biwa (center, offshore of Karasaki)	tr(1,300)
Kyoto Pref.		Miyazu Port	nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	7,100
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	60,000
	36	Mouth of Riv. Yodo (Osaka City)	tr(1,900)
		Osaka Port	5,100
	38	Outside Osaka Port	16,000
Hyogo Pref.		Offshore of Himeji	tr(1,800)
Kobe City		Kobe Port (center)	6,000
Nara Pref.		Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	_	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.		Offshore of Mizushima	tr(1,400)
Hiroshima Pref.		Kure Port	4,700
37 1:D 0	45	Hiroshima Bay	2,300
Yamaguchi Pref.	46	i ny n ny	4,900
	47		tr(1,100)
T 1 1' D C	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City) Takamatsu Port	nd 5 900
Kagawa Pref. Ehime Pref.	50	Niihama Port	5,800 nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	4,000
Fukuoka City		Hakata Bay	tr(1,200)
Saga Pref.		Imari Bay	3,800
Nagasaki Pref.		Omura Bay	2,500
Oita Pref.		Mouth of Riv. Oita (Oita City)	2,300 nd
Miyazaki Pref.		Mouth of Riv. Oyodo (Miyazaki City)	nd
Kagoshima Pref.	_	Riv. Amori (Kirishima City)	nd
114505111114 1 101.	60	Riv. Gotanda (Ichikikushikino City)	nd
Okinawa Pref.	61	Naha Port	13,000
	. ~-	process of the contract of the	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.

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

⁽Note 4) nd: Not detected

[24] Dicofol/sediment (pg/g-dry)

Monitored year: 2019

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

	Aggregated value
Geometric mean	4
Median	4
Maximum	84
Minimum	nd

Local communities	No.	Monitored sites	Measured value
Hokkaido	1	Ishikarikakokyo Bridge, Mouth of Riv. Ishikari (Ishikari City)	84
	2	Tomakomai Port	nd
Iwate Pref.	3	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	nd
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	8
Fukushima Pref.	8	Onahama Port	7
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	6
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	tr(2)
Chiba Pref.	_	Coast of Ichihara and Anegasaki	tr(3)
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	35
	_	Mouth of Riv. Sumida (Minato Ward)	25
Yokohama City		Yokohama Port	12
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	5
N" - D C		Keihin Canal, Port of Kawasaki	4
Niigata Pref.		Lower Riv. Shinano (Niigata City)	tr(2)
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	tr(3)
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City) Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	tr(3)
Fukui Pref.	21		nd
Yamanashi Pref.	22	Senshu-bashi Bridge, Riv. Arakawa (Kofu City)	nd
Nagano Pref.		Lake Suwa (center)	37
Shizuoka Pref.	24	Shimizu Port Velestayle heeki Pridee Piy Tengay (Iyyete City)	55
Aichi Pref.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City) Kinuura Port	nd
Alcili Piel.		Nagova Port	nd 6
Mie Pref.	_	Yokkaichi Port	11
WHE FIEL.		Toba Port	tr(3)
Shiga Pref.	_	Lake Biwa (center, offshore of Minamihira)	6
Singa i ici.		Lake Biwa (center, offshore of Karasaki)	nd
Kyoto Pref.		Miyazu Port	nd
Kyoto City	_	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	10
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	67
Osaka City		Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	27
osana ony		Mouth of Riv. Yodo (Osaka City)	4
		Osaka Port	25
	38	Outside Osaka Port	31
Hyogo Pref.	39	Offshore of Himeji	nd
Kobe City	40	Kobe Port (center)	tr(3)
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	11
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	47
Okayama Pref.	43	Offshore of Mizushima	nd
Hiroshima Pref.	44	Kure Port	6
	45	Hiroshima Bay	6
Yamaguchi Pref.	46		nd
	47	Offshore of Ube	nd
	48	Offshore of Hagi	nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref.	50		39
Ehime Pref.	_	Niihama Port	nd
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	nd
Kitakyushu City	53	Dokai Bay	5
Fukuoka City		Hakata Bay	4
Saga Pref.	55		4
Nagasaki Pref.	_	Omura Bay	5
Oita Pref.		Mouth of Riv. Oita (Oita City)	4
Miyazaki Pref.	58	Mouth of Riv. Oyodo (Miyazaki City)	tr(3)
Kagoshima Pref.	59	Riv. Amori (Kirishima City)	nd
	60	Riv. Gotanda (Ichikikushikino City)	8
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.

⁽Note 4) nd : Not detected

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

Monitored year: 2019

Detection Frequency (site): 10/61 (Missing value: 0)
Detection Frequency (sample): 10/61 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	15
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	Toyosawa Bridge, Riv. Toyosawa (Hanamaki City)	nd
Miyagi Pref.	4	Sendai Bay (Matsushima Bay)	nd
Sendai City	5	Hirose-ohashi Bridge, Riv. Hirose (Sendai City)	nd
Akita Pref.	6	Lake Hachiro	nd
Yamagata Pref.	7	Mouth of Riv. Mogami (Sakata City)	nd
Fukushima Pref.	8	Onahama Port	nd
Ibaraki Pref.	9	Tonekamome-ohasi Bridge, Mouth of Riv. Tone (Kamisu City)	tr(6)
Tochigi Pref.		Tagawa Kyubun Area Head Works (Utsunomiya City)	nd
Chiba Pref.		Coast of Ichihara and Anegasaki	15
Chiba City		Mouth of Riv. Hanami (Chiba City)	nd
Tokyo Met.		Mouth of Riv. Arakawa (Koto Ward)	nd
X 1 1 G':		Mouth of Riv. Sumida (Minato Ward)	tr(9)
Yokohama City	15		nd
Kawasaki City		Mouth of Riv. Tama (Kawasaki City)	nd
Niigata Pref.		Keihin Canal, Port of Kawasaki Lower Riv. Shinano (Niigata City)	nd nd
Toyama Pref.		Hagiura-bashi Bridge, Mouth of Riv. Jintsu (Toyama City)	
Ishikawa Pref.		Mouth of Riv. Sai (Kanazawa City)	nd
Fukui Pref.	21	Mishima-bashi Bridge, Riv. Shono (Tsuruga City)	nd nd
Yamanashi Pref.	22		nd
Nagano Pref.		Lake Suwa (center)	nd
Shizuoka Pref.		Shimizu Port	nd
Silizuoka i iei.	25	Kaketsuka-bashi Bridge, Riv. Tenryu (Iwata City)	nd
Aichi Pref.		Kinuura Port	nd
Alcin Fici.		Nagoya Port	nd
Mie Pref.	28		nd
1,110 1 1011		Toba Port	nd
Shiga Pref.		Lake Biwa (center, offshore of Minamihira)	tr(6)
S	31	Lake Biwa (center, offshore of Karasaki)	tr(9)
Kyoto Pref.	32		nd
Kyoto City	33	Miyamae-bashi Bridge,Riv. Katsura (Kyoto City)	nd
Osaka Pref.		Mouth of Riv. Yamato (Sakai City)	nd
Osaka City	35	Kema-bashi Bridge, Riv. Oh-kawa (Osaka City)	nd
	36	Mouth of Riv. Yodo (Osaka City)	nd
	37		nd
	38		nd
Hyogo Pref.		Offshore of Himeji	nd
Kobe City	40	Kobe Port (center)	nd
Nara Pref.	41	Taisho-bashi Bridge, Riv. Yamato (Oji Town)	nd
Wakayama Pref.	42	Kinokawa-ohashi Bridge, Mouth of Riv. Kinokawa (Wakayama City)	nd
Okayama Pref.	43		nd
Hiroshima Pref.		Kure Port	nd
77 1'D C	45	Hiroshima Bay	tr(5)
Yamaguchi Pref.	46		nd
	47	Offshore of Ube	nd
T 1 1' D C			nd
Tokushima Pref.	49	Mouth of Riv. Yoshino (Tokushima City)	nd
Kagawa Pref. Ehime Pref.	50	Takamatsu Port Niihama Port	tr(6)
Kochi Pref.	52	Mouth of Riv. Shimanto (Shimanto City)	
Kitakyushu City	53	Dokai Bay	nd tr(6)
Fukuoka City	54	·	tr(9)
Saga Pref.	55		nd
Nagasaki Pref.	56		tr(12)
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.

⁽Note 4) nd: Not detected

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

Monitored year: 2019

Detection Frequency (site) : 61/61 (Missing value : 0)
Detection Frequency (sample) : 48/48 (Missing value : 0)

Detection limit: **3.3 Quantification limit: **12

	Aggregated value
Geometric mean	11,000
Median	12,000
Maximum	190,000
Minimum	350

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	2,200	12,000	
Median	1,900	12,000	
Maximum	17,000	160,000	190,000
Minimum	350	1,000	190,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	1,900
	Yokohama City	2	Yokohama Port	Blue mussel	17,000
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	350
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	1,400
	Iwate Pref.	2	Yamada Bay	Greenling	10,000
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	10,000
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	3,500
	Tokyo Met.	5	Tokyo Bay	Sea bass	61,000
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	35,000
	Nagoya City	7	Nagoya Port	Striped mullet	14,000
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	16,000
	Osaka Pref.	9	Osaka Bay	Sea bass	160,000
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	82,000
	Tottori Pref.	11	Nakaumi	Sea bass	8,100
	Hiroshima City	12	Hiroshima Bay	Sea bass	19,000
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	1,000
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	32,000
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	4,100
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	4,300
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	190,000
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	3,900,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	3,800
	Hyogo Pref. Reference value	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	3,8000,000
		value		Egg of Great Cormorant (Egg white)	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) *: Indicates the sum value of the Quantification [Detection] limits of each congeners.

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

Monitored year: 2019

Detection Frequency (site) : 16/20 (Missing value : 0)
Detection Frequency (sample) : 16/20 (Missing value : 0)

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	tr(2)
Median	tr(1)
Maximum	21
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	13/16	1/1
Detection Frequency (sample)	2/3	13/16	1/1
Geometric mean	tr(2)	tr(2)	
Median	tr(1)	tr(2)	
Maximum	7	21	tr(1)
Minimum	nd	nd	tr(1)

	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	7
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	tr(2)
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	3
	Tokyo Met.	5	Tokyo Bay	Sea bass	9
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	3
	Nagoya City	7	Nagoya Port	Striped mullet	12
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	tr(1)
	Osaka Pref.	9	Osaka Bay	Sea bass	21
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	8
	Tottori Pref.	11	Nakaumi	Sea bass	tr(1)
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(2)
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	tr(1)
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	tr(1)
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(1)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	tr(1)
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	tr(2)
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	18
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	27
Median	21
Maximum	1,300
Minimum	tr(3)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	26	30	
Median	34	21	
Maximum	78	1,300	5
Minimum	7	tr(3)	5

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	34
	Yokohama City	2	Yokohama Port	Blue mussel	78
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	7
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	6
	Iwate Pref.	2	Yamada Bay	Greenling	27
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	15
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	29
	Tokyo Met.	5	Tokyo Bay	Sea bass	290
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	78
	Nagoya City	7	Nagoya Port	Striped mullet	180
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	8
•	Osaka Pref.	9	Osaka Bay	Sea bass	1,300
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	210
	Tottori Pref.	11	Nakaumi	Sea bass	14
	Hiroshima City	12	Hiroshima Bay	Sea bass	44
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(3)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	13
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	tr(4)
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	7
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	5
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	24
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(2)
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	660
		value		Egg of Great Cormorant (Egg white)	tr(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.

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

Monitored year: 2019

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

Detection limit : 1 Quantification limit : 4

	Aggregated value
Geometric mean	300
Median	250
Maximum	23,000
Minimum	14

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	100	350	
Median	84	250	
Maximum	920	23,000	910
Minimum	14	17	910

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	84
	Yokohama City	2	Yokohama Port	Blue mussel	920
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	14
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	48
	Iwate Pref.	2	Yamada Bay	Greenling	240
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	410
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	260
	Tokyo Met.	5	Tokyo Bay	Sea bass	4,700
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	1,800
	Nagoya City	7	Nagoya Port	Striped mullet	1,900
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	200
	Osaka Pref.	9	Osaka Bay	Sea bass	23,000
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	4,000
	Tottori Pref.	11	Nakaumi	Sea bass	130
	Hiroshima City	12	Hiroshima Bay	Sea bass	460
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	19
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	240
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	29
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	17
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	910
	Yamanashi Pref.	Reference	8 ,	Egg of Great Cormorant (Egg yolk)	82,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	91
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1700,000
		value		Egg of Great Cormorant (Egg white)	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).

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

Monitored year: 2019

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

Detection limit : 1 Quantification limit : 4

	Aggregated value
Geometric mean	1,300
Median	1,800
Maximum	50,000
Minimum	44

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	340	1,500	
Median	220	1,800	
Maximum	4,100	50,000	5,200
Minimum	44	96	5,200

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	220
	Yokohama City	2	Yokohama Port	Blue mussel	4,100
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	44
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	160
	Iwate Pref.	2	Yamada Bay	Greenling	720
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	1,600
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	720
	Tokyo Met.	5	Tokyo Bay	Sea bass	17,000
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	8,300
	Nagoya City	7	Nagoya Port	Striped mullet	5,300
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	1,900
	Osaka Pref.	9	Osaka Bay	Sea bass	50,000
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	11,000
	Tottori Pref.	11	Nakaumi	Sea bass	750
	Hiroshima City	12	Hiroshima Bay	Sea bass	2,300
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	96
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	1,900
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	250
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	100
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	5,200
	Yamanashi Pref.	Reference	8 /	Egg of Great Cormorant (Egg yolk)	290,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	400
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	4400,000
		value		Egg of Great Cormorant (Egg white)	5,900

(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).

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	8.9
Median	9.2
Maximum	180
Minimum	tr(1.2)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	5.6	9.5	
Median	4.0	9.2	
Maximum	29	180	12
Minimum	tr(1.5)	tr(1.2)	12

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	4.0
	Yokohama City	2	Yokohama Port	Blue mussel	29
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(1.5)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(1.3)
	Iwate Pref.	2	Yamada Bay	Greenling	11
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	5.0
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	4.0
	Tokyo Met.	5	Tokyo Bay	Sea bass	55
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	26
	Nagoya City	7	Nagoya Port	Striped mullet	22
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	33
	Osaka Pref.	9	Osaka Bay	Sea bass	180
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	50
	Tottori Pref.	11	Nakaumi	Sea bass	2.8
	Hiroshima City	12	Hiroshima Bay	Sea bass	12
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(1.2)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	7.4
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	3.8
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(1.4)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	12
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	130
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	530
		value		Egg of Great Cormorant (Egg white)	nd

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

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

⁽Note 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: 2019

Detection Frequency (site) : 11/20 (Missing value : 0) Detection Frequency (sample) : 11/20 (Missing value : 0)

Detection limit : 0.6 Quantification limit : 1.6

	Aggregated value
Geometric mean	tr(0.8)
Median	tr(0.6)
Maximum	10
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	9/16	1/1
Detection Frequency (sample)	1/3	9/16	1/1
Geometric mean	nd	tr(0.7)	
Median	nd	tr(0.6)	
Maximum	tr(1.2)	7.1	10
Minimum	nd	nd	10

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	tr(1.2)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	tr(0.7)
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	tr(0.8)
	Tokyo Met.	5	Tokyo Bay	Sea bass	tr(1.3)
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	tr(0.6)
	Nagoya City	7	Nagoya Port	Striped mullet	1.6
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	3.1
	Osaka Pref.	9	Osaka Bay	Sea bass	7.1
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	2.0
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(1.1)
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	10
	Yamanashi Pref.	Reference	8 /	Egg of Great Cormorant (Egg yolk)	630
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	2,200
		value		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.

(Note 4) nd : Not detected

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

Monitored year: 2019

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

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	2,700
Median	3,300
Maximum	45,000
Minimum	98

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	650	3,000	
Median	460	3,300	
Maximum	6,200	45,000	36,000
Minimum	98	250	36,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	460
	Yokohama City	2	Yokohama Port	Blue mussel	6,200
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	98
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	360
	Iwate Pref.	2	Yamada Bay	Greenling	1,900
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	2,600
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	1,200
	Tokyo Met.	5	Tokyo Bay	Sea bass	21,000
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	12,000
	Nagoya City	7	Nagoya Port	Striped mullet	3,900
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	6,000
	Osaka Pref.	9	Osaka Bay	Sea bass	45,000
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	19,000
	Tottori Pref.	11	Nakaumi	Sea bass	2,600
	Hiroshima City	12	Hiroshima Bay	Sea bass	4,600
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	250
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	5,600
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	800
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	350
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	36,000
	Yamanashi Pref.	Reference	8 ,	Egg of Great Cormorant (Egg yolk)	1000,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	1,100
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	8600,000
		value		Egg of Great Cormorant (Egg white)	6,900

(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).

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

Monitored year: 2019

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

Detection limit : 0.6 Quantification limit : 1.6

	Aggregated value
Geometric mean	150
Median	190
Maximum	3,600
Minimum	5.0

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	33	160	
Median	25	190	
Maximum	300	1,700	3,600
Minimum	5.0	17	3,600

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	25
	Yokohama City	2	Yokohama Port	Blue mussel	300
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	5.0
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	28
	Iwate Pref.	2	Yamada Bay	Greenling	150
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	200
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	52
	Tokyo Met.	5	Tokyo Bay	Sea bass	800
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	500
	Nagoya City	7	Nagoya Port	Striped mullet	240
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	390
	Osaka Pref.	9	Osaka Bay	Sea bass	1,700
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	760
	Tottori Pref.	11	Nakaumi	Sea bass	80
	Hiroshima City	12	Hiroshima Bay	Sea bass	170
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	17
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	210
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	64
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	26
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	3,600
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	140,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	160
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	760,000
		value		Egg of Great Cormorant (Egg white)	690

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

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

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

Monitored year: 2019

Detection Frequency (site): 19/20 (Missing value: 0)
Detection Frequency (sample): 19/20 (Missing value: 0)

Detection limit : 0.9 Quantification limit : 2.2

	Aggregated value
Geometric mean	9.7
Median	11
Maximum	300
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	16/16	1/1
Detection Frequency (sample)	2/3	16/16	1/1
Geometric mean	tr(2.0)	11	
Median	tr(1.3)	11	
Maximum	14	120	300
Minimum	nd	tr(1.2)	300

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(1.3)
-	Yokohama City	2	Yokohama Port	Blue mussel	14
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	2.2
	Iwate Pref.	2	Yamada Bay	Greenling	9.9
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	12
-	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	5.5
	Tokyo Met.	5	Tokyo Bay	Sea bass	43
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	24
	Nagoya City	7	Nagoya Port	Striped mullet	18
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	26
	Osaka Pref.	9	Osaka Bay	Sea bass	120
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	47
-	Tottori Pref.	11	Nakaumi	Sea bass	4.0
-	Hiroshima City	12	Hiroshima Bay	Sea bass	8.9
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(1.2)
-	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	16
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	5.5
-	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(1.5)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	300
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	13,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	10
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	71,000
		value		Egg of Great Cormorant (Egg white)	45

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

Detection frequency (sample) is based on the number of samples, 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

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

Monitored year: 2019

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

Detection limit : 0.8 Quantification limit : 2.0

	Aggregated value
Geometric mean	520
Median	670
Maximum	17,000
Minimum	20

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	120	550	
Median	73	670	
Maximum	1,100	6,700	17,000
Minimum	20	46	17,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	73
	Yokohama City	2	Yokohama Port	Blue mussel	1,100
•	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	20
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	83
•	Iwate Pref.	2	Yamada Bay	Greenling	460
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	680
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	190
•	Tokyo Met.	5	Tokyo Bay	Sea bass	3,200
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	2,000
•	Nagoya City	7	Nagoya Port	Striped mullet	680
•	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	990
•	Osaka Pref.	9	Osaka Bay	Sea bass	6,700
•	Hyogo Pref.	10	Offshore of Himeji	Sea bass	3,100
	Tottori Pref.	11	Nakaumi	Sea bass	410
	Hiroshima City	12	Hiroshima Bay	Sea bass	650
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	46
•	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	880
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	170
•	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	88
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	17,000
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	550,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	460
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	3900,000
		value		Egg of Great Cormorant (Egg white)	2,300

(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.

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

Monitored year: 2019

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

	Aggregated value
Geometric mean	10
Median	12
	12
Maximum	240
Minimum	tr(0.7)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	2.6	11	
Median	tr(1.3)	12	
Maximum	19	120	240
Minimum	tr(0.7)	tr(1.1)	240

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(1.3)
	Yokohama City	2	Yokohama Port	Blue mussel	19
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(0.7)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	1.6
	Iwate Pref.	2	Yamada Bay	Greenling	8.9
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	11
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	4.6
	Tokyo Met.	5	Tokyo Bay	Sea bass	47
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	31
	Nagoya City	7	Nagoya Port	Striped mullet	15
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	25
-	Osaka Pref.	9	Osaka Bay	Sea bass	120
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	49
	Tottori Pref.	11	Nakaumi	Sea bass	6.1
	Hiroshima City	12	Hiroshima Bay	Sea bass	12
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(1.1)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	21
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	4.1
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	1.7
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	240
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	9,800
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	7.4
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	57,000
		value		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.

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

Monitored year: 2019

Detection Frequency (site): 19/20 (Missing value: 0)
Detection Frequency (sample): 19/20 (Missing value: 0)

Detection limit : 0.7 Quantification limit : 1.8

	Aggregated value
Geometric mean	3.1
Median	2.9
Maximum	96
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	15/16	1/1
Detection Frequency (sample)	3/3	15/16	1/1
Geometric mean	tr(1.1)	3.0	
Median	tr(0.9)	3.8	
Maximum	2.4	14	96
Minimum	tr(0.7)	nd	96

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(0.9)
	Yokohama City	2	Yokohama Port	Blue mussel	2.4
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(0.7)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(1.1)
	Iwate Pref.	2	Yamada Bay	Greenling	4.2
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	3.4
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	1.9
	Tokyo Met.	5	Tokyo Bay	Sea bass	6.7
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	4.1
	Nagoya City	7	Nagoya Port	Striped mullet	2.0
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	10
	Osaka Pref.	9	Osaka Bay	Sea bass	14
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	13
	Tottori Pref.	11	Nakaumi	Sea bass	tr(0.9)
	Hiroshima City	12	Hiroshima Bay	Sea bass	4.8
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(1.1)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	5.8
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	tr(1.5)
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	96
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	2,700
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(1.4)
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	6,000
		value		Egg of Great Cormorant (Egg white)	1.9

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

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

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

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

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

Monitored year: 2019

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

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	3,700
Median	3,900
Maximum	99,000
Minimum	150

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	840	4,000	
Median	810	3,900	
Maximum	4,800	31,000	99,000
Minimum	150	420	99,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	810
	Yokohama City	2	Yokohama Port	Blue mussel	4,800
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	150
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	560
	Iwate Pref.	2	Yamada Bay	Greenling	4,100
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	3,700
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	1,000
	Tokyo Met.	5	Tokyo Bay	Sea bass	14,000
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	9,700
	Nagoya City	7	Nagoya Port	Striped mullet	2,400
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	6,000
	Osaka Pref.	9	Osaka Bay	Sea bass	31,000
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	31,000
	Tottori Pref.	11	Nakaumi	Sea bass	3,500
	Hiroshima City	12	Hiroshima Bay	Sea bass	7,700
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	420
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	14,000
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	1,700
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	1,200
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	99,000
	Yamanashi Pref.	Reference	8 /	Egg of Great Cormorant (Egg yolk)	1800,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	1,600
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	15000,000
		value		Egg of Great Cormorant (Egg white)	6,800

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

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

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

Monitored year: 2019

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

Detection limit : 0.8 Quantification limit : 2.0

	Aggregated value
Geometric mean	57
Median	61
Maximum	2,700
Minimum	2.7

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	12	60	
Median	8.0	61	
Maximum	78	580	2,700
Minimum	2.7	8.3	2,700

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	8.0
	Yokohama City	2	Yokohama Port	Blue mussel	78
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	2.7
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	9.2
	Iwate Pref.	2	Yamada Bay	Greenling	64
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	64
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	15
	Tokyo Met.	5	Tokyo Bay	Sea bass	220
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	150
	Nagoya City	7	Nagoya Port	Striped mullet	58
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	130
	Osaka Pref.	9	Osaka Bay	Sea bass	580
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	380
	Tottori Pref.	11	Nakaumi	Sea bass	33
	Hiroshima City	12	Hiroshima Bay	Sea bass	57
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	8.3
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	130
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	34
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	15
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	2,700
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	75,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	44
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	510,000
		value		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).

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

Monitored year: 2019

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

Detection limit : 0.8 Quantification limit : 2.1

	Aggregated value
Geometric mean	16
Median	17
Maximum	710
Minimum	tr(0.9)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	3.6	16	
Median	2.4	17	
Maximum	21	130	710
Minimum	tr(0.9)	2.2	710

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	2.4
	Yokohama City	2	Yokohama Port	Blue mussel	21
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(0.9)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	3.0
	Iwate Pref.	2	Yamada Bay	Greenling	18
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	20
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	5.1
	Tokyo Met.	5	Tokyo Bay	Sea bass	53
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	38
	Nagoya City	7	Nagoya Port	Striped mullet	13
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	33
-	Osaka Pref.	9	Osaka Bay	Sea bass	130
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	89
	Tottori Pref.	11	Nakaumi	Sea bass	10
	Hiroshima City	12	Hiroshima Bay	Sea bass	16
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	2.2
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	33
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	9.1
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	3.7
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	710
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	19,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	9.8
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	100,000
		value		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.

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

Monitored year: 2019

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

Detection limit : 0.7 Quantification limit : 1.7

	Aggregated value
Geometric mean	34
Median	38
Maximum	1,600
Minimum	1.7

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	8.0	35	
Median	6.6	38	
Maximum	46	270	1,600
Minimum	1.7	3.2	1,600

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	6.6
	Yokohama City	2	Yokohama Port	Blue mussel	46
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	1.7
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	4.9
	Iwate Pref.	2	Yamada Bay	Greenling	38
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	37
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	12
	Tokyo Met.	5	Tokyo Bay	Sea bass	120
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	91
	Nagoya City	7	Nagoya Port	Striped mullet	28
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	66
	Osaka Pref.	9	Osaka Bay	Sea bass	270
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	220
	Tottori Pref.	11	Nakaumi	Sea bass	29
	Hiroshima City	12	Hiroshima Bay	Sea bass	41
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	3.2
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	87
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	17
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	8.2
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	1,600
	Yamanashi Pref.	Reference	8 ,	Egg of Great Cormorant (Egg yolk)	38,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	21
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	240,000
		value		Egg of Great Cormorant (Egg white)	60

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

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

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

Monitored year: 2019

Detection Frequency (site): 7/20 (Missing value: 0)
Detection Frequency (sample): 7/20 (Missing value: 0)

Detection limit : 0.8 Quantification limit : 2.1

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	44
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	6/16	1/1
Detection Frequency (sample)	0/3	6/16	1/1
Geometric mean	nd	nd	
Median	nd	nd	
Maximum	nd	tr(2.0)	44
Minimum	nd	nd	44

	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
	Iwate Pref.	2	Yamada Bay	Greenling	nd
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	5	Tokyo Bay	Sea bass	nd
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	tr(0.9)
	Nagoya City	7	Nagoya Port	Striped mullet	nd
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	tr(1.3)
	Osaka Pref.	9	Osaka Bay	Sea bass	tr(0.8)
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	tr(2.0)
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(1.5)
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	tr(1.9)
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	44
	Yamanashi Pref.	Reference	8 ,	Egg of Great Cormorant (Egg yolk)	460
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	610
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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: 2019

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

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	1,400
Median	1,400
Maximum	37,000
Minimum	36

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	230	1,600	
Median	300	1,600	
Maximum	1,100	14,000	37,000
Minimum	36	210	37,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	300
	Yokohama City	2	Yokohama Port	Blue mussel	1,100
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	36
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	240
	Iwate Pref.	2	Yamada Bay	Greenling	2,800
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	1,600
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	280
	Tokyo Met.	5	Tokyo Bay	Sea bass	3,700
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	2,900
	Nagoya City	7	Nagoya Port	Striped mullet	660
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	1,300
	Osaka Pref.	9	Osaka Bay	Sea bass	8,300
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	14,000
	Tottori Pref.	11	Nakaumi	Sea bass	940
	Hiroshima City	12	Hiroshima Bay	Sea bass	3,400
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	210
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	8,200
-	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	1,100
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	1,500
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	37,000
[Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	570,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	470
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	6600,000
		value		Egg of Great Cormorant (Egg white)	2,100

⁽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).

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

Monitored year: 2019

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

Detection limit : 0.8 Quantification limit : 2.2

	Aggregated value
Geometric mean	98
Median	120
Maximum	5,200
Minimum	tr(1.4)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	6.2	130	
Median	5.9	140	
Maximum	29	920	5,200
Minimum	tr(1.4)	17	5,200

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	5.9
	Yokohama City	2	Yokohama Port	Blue mussel	29
•	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(1.4)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	21
	Iwate Pref.	2	Yamada Bay	Greenling	280
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	130
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	22
	Tokyo Met.	5	Tokyo Bay	Sea bass	320
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	260
	Nagoya City	7	Nagoya Port	Striped mullet	72
•	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	150
•	Osaka Pref.	9	Osaka Bay	Sea bass	700
•	Hyogo Pref.	10	Offshore of Himeji	Sea bass	920
	Tottori Pref.	11	Nakaumi	Sea bass	62
	Hiroshima City	12	Hiroshima Bay	Sea bass	200
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	17
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	450
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	100
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	56
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	5,200
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	96,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	71
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	910,000
		value		Egg of Great Cormorant (Egg white)	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.

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

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

Monitored year: 2019

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

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	320
Median	390
Maximum	12,000
Minimum	4

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	26	400	
Median	27	490	
Maximum	160	2,600	12,000
Minimum	4	55	12,000

	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	160
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	4
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	68
	Iwate Pref.	2	Yamada Bay	Greenling	730
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	470
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	67
	Tokyo Met.	5	Tokyo Bay	Sea bass	920
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	790
	Nagoya City	7	Nagoya Port	Striped mullet	190
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	290
	Osaka Pref.	9	Osaka Bay	Sea bass	2,000
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	2,600
	Tottori Pref.	11	Nakaumi	Sea bass	170
	Hiroshima City	12	Hiroshima Bay	Sea bass	640
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	55
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	1,700
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	310
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	510
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	12,000
	Yamanashi Pref.	Reference	3 /	Egg of Great Cormorant (Egg yolk)	210,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	140
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	2400,000
		value		Egg of Great Cormorant (Egg white)	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).

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

Monitored year: 2019

Detection Frequency (site): 19/20 (Missing value: 0)
Detection Frequency (sample): 19/20 (Missing value: 0)

Detection limit: 0.8 Quantification limit: 2.1

	Aggregated value
Geometric mean	6.7
Median	6.5
Maximum	410
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	16/16	1/1
Detection Frequency (sample)	2/3	16/16	1/1
Geometric mean	tr(1.3)	7.0	
Median	tr(1.1)	8.9	
Maximum	5.3	54	410
Minimum	nd	tr(0.9)	410

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(1.1)
	Yokohama City	2	Yokohama Port	Blue mussel	5.3
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(1.2)
	Iwate Pref.	2	Yamada Bay	Greenling	12
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	7.7
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	2.2
	Tokyo Met.	5	Tokyo Bay	Sea bass	15
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	12
	Nagoya City	7	Nagoya Port	Striped mullet	3.7
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	10
	Osaka Pref.	9	Osaka Bay	Sea bass	34
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	54
	Tottori Pref.	11	Nakaumi	Sea bass	3.2
	Hiroshima City	12	Hiroshima Bay	Sea bass	10
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(0.9)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	32
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	4.6
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	2.7
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	410
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	6,800
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	3.7
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	48,000
		value		Egg of Great Cormorant (Egg white)	6.6

(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.

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

Monitored year: 2019

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

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	210
Median	270
Maximum	9,400
Minimum	tr(2)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	12	290	
Median	16	390	
Maximum	58	2,200	9,400
Minimum	tr(2)	37	9,400

	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	58
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(2)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	37
	Iwate Pref.	2	Yamada Bay	Greenling	630
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	320
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	40
	Tokyo Met.	5	Tokyo Bay	Sea bass	500
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	460
	Nagoya City	7	Nagoya Port	Striped mullet	130
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	180
	Osaka Pref.	9	Osaka Bay	Sea bass	1,000
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	2,200
	Tottori Pref.	11	Nakaumi	Sea bass	120
	Hiroshima City	12	Hiroshima Bay	Sea bass	510
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	38
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	1,500
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	220
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	930
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	9,400
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	97,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	95
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1500,000
		value		Egg of Great Cormorant (Egg white)	250

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

Detection frequency (sample) is based on the number of samples, 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/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 18/20 (Missing value : 0)
Detection Frequency (sample) : 18/20 (Missing value : 0)

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	19
Median	31
Maximum	1,400
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	16/16	1/1
Detection Frequency (sample)	1/3	16/16	1/1
Geometric mean	nd	28	
Median	nd	33	
Maximum	tr(1)	180	1,400
Minimum	nd	3	1,400

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	tr(1)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	3
	Iwate Pref.	2	Yamada Bay	Greenling	43
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	31
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	9
	Tokyo Met.	5	Tokyo Bay	Sea bass	44
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	37
	Nagoya City	7	Nagoya Port	Striped mullet	14
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	31
	Osaka Pref.	9	Osaka Bay	Sea bass	73
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	140
	Tottori Pref.	11	Nakaumi	Sea bass	8
	Hiroshima City	12	Hiroshima Bay	Sea bass	35
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	5
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	130
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	15
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	180
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	1,400
-	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	15,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	11
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	83,000
		value		Egg of Great Cormorant (Egg white)	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.

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

Monitored year: 2019

Detection Frequency (site) : 18/20 (Missing value : 0)
Detection Frequency (sample) : 18/20 (Missing value : 0)

Detection limit : 0.6 Quantification limit : 1.6

	Aggregated value
Geometric mean	7.5
Median	7.6
Maximum	760
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	16/16	1/1
Detection Frequency (sample)	1/3	16/16	1/1
Geometric mean	tr(0.8)	8.6	
Median	nd	8.2	
Maximum	4.9	66	760
Minimum	nd	tr(1.2)	760

	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	4.9
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(1.2)
	Iwate Pref.	2	Yamada Bay	Greenling	6.3
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	18
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	8.5
	Tokyo Met.	5	Tokyo Bay	Sea bass	19
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	16
	Nagoya City	7	Nagoya Port	Striped mullet	3.8
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	12
	Osaka Pref.	9	Osaka Bay	Sea bass	14
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	26
	Tottori Pref.	11	Nakaumi	Sea bass	3.9
	Hiroshima City	12	Hiroshima Bay	Sea bass	7.3
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	3.8
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	66
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	2.6
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	7.9
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	760
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	5,600
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	4.2
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	24,000
		value		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.

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

Monitored year: 2019

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

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	96
Median	82
Maximum	3,200
Minimum	12

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	23	100	
Median	16	99	
Maximum	65	1,100	3,200
Minimum	12	12	3,200

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	65
	Yokohama City	2	Yokohama Port	Blue mussel	12
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	16
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	240
	Iwate Pref.	2	Yamada Bay	Greenling	330
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	110
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	1,100
	Tokyo Met.	5	Tokyo Bay	Sea bass	210
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	63
	Nagoya City	7	Nagoya Port	Striped mullet	70
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	520
	Osaka Pref.	9	Osaka Bay	Sea bass	120
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	110
	Tottori Pref.	11	Nakaumi	Sea bass	12
	Hiroshima City	12	Hiroshima Bay	Sea bass	77
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	35
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	87
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	23
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	28
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	3,200
	Yamanashi Pref.	Reference	8 ,	Egg of Great Cormorant (Egg yolk)	46,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	74
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	34,000
		value		Egg of Great Cormorant (Egg white)	97

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

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

[11] HCHs/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 18/20 (Missing value : 0) Detection Frequency (sample) : 18/20 (Missing value : 0)

 $\begin{aligned} & \text{Detection limit}: \& 6 \\ & \text{Quantification limit}: \& 15 \end{aligned}$

	Aggregated value
Geometric mean	43
Median	50
Maximum	1,000
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	14/16	1/1
Detection Frequency (sample)	3/3	14/16	1/1
Geometric mean	33	37	
Median	47	54	
Maximum	53	570	1,000
Minimum	15	nd	1,000

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	47
	Yokohama City	2	Yokohama Port	Blue mussel	15
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	53
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	140
	Iwate Pref.	2	Yamada Bay	Greenling	170
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	20
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	570
	Tokyo Met.	5	Tokyo Bay	Sea bass	76
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	27
	Nagoya City	7	Nagoya Port	Striped mullet	98
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	77
	Osaka Pref.	9	Osaka Bay	Sea bass	180
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	96
	Tottori Pref.	11	Nakaumi	Sea bass	tr(10)
	Hiroshima City	12	Hiroshima Bay	Sea bass	31
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	tr(7)
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(8)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	1,000
-	Yamanashi Pref.		8 ,	Egg of Great Cormorant (Egg yolk)	17,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	200
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	14,000
		value		Egg of Great Cormorant (Egg white)	1,200

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

Detection frequency (sample) is based on the number of samples, 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 isomers.

[11-1] α -HCH/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 16/20 (Missing value : 0)
Detection Frequency (sample) : 16/20 (Missing value : 0)

Detection limit : 2 Quantification limit : 4

	Aggregated value
Geometric mean	9
Median	8
Maximum	130
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	12/16	1/1
Detection Frequency (sample)	3/3	12/16	1/1
Geometric mean	9	8	
Median	12	8	
Maximum	14	130	63
Minimum	4	nd	63

	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	4
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	14
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	57
	Iwate Pref.	2	Yamada Bay	Greenling	46
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	8
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	130
	Tokyo Met.	5	Tokyo Bay	Sea bass	18
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	5
	Nagoya City	7	Nagoya Port	Striped mullet	26
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	7
	Osaka Pref.	9	Osaka Bay	Sea bass	27
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	8
	Tottori Pref.	11	Nakaumi	Sea bass	tr(3)
	Hiroshima City	12	Hiroshima Bay	Sea bass	6
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	63
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	460
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(3)
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	240
		value		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.

[11-2] β -HCH/wildlife (pg/g-wet)

Monitored year: 2019

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

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	32
Median	33
Maximum	950
Minimum	3

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	23	27	
Median	32	35	
Maximum	33	400	950
Minimum	11	3	950

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	33
	Yokohama City	2	Yokohama Port	Blue mussel	11
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	32
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	69
	Iwate Pref.	2	Yamada Bay	Greenling	110
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	9
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	400
	Tokyo Met.	5	Tokyo Bay	Sea bass	47
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	19
	Nagoya City	7	Nagoya Port	Striped mullet	58
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	68
	Osaka Pref.	9	Osaka Bay	Sea bass	140
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	81
	Tottori Pref.	11	Nakaumi	Sea bass	6
	Hiroshima City	12	Hiroshima Bay	Sea bass	22
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	3
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	7
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	4
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	8
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	950
	Yamanashi Pref.	Reference	3 /	Egg of Great Cormorant (Egg yolk)	16,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	200
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	14,000
		value		Egg of Great Cormorant (Egg white)	1,200

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

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

[11-3] γ -HCH (synonym:Lindane) /wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 16/20 (Missing value : 0)
Detection Frequency (sample) : 16/20 (Missing value : 0)

Detection limit : 1 Quantification limit : 4

	Aggregated value
Geometric mean	tr(3)
Median	tr(3)
Maximum	34
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	13/16	1/1
Detection Frequency (sample)	2/3	13/16	1/1
Geometric mean	tr(2)	tr(3)	
Median	tr(2)	tr(3)	
Maximum	7	34	7
Minimum	nd	nd	7

	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	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	7
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	16
	Iwate Pref.	2	Yamada Bay	Greenling	15
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	tr(3)
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	34
	Tokyo Met.	5	Tokyo Bay	Sea bass	8
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	tr(3)
	Nagoya City	7	Nagoya Port	Striped mullet	11
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	tr(2)
	Osaka Pref.	9	Osaka Bay	Sea bass	9
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	tr(3)
	Tottori Pref.	11	Nakaumi	Sea bass	tr(1)
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(3)
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(1)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	7
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	100
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(1)
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	110
		value		Egg of Great Cormorant (Egg white)	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.

[11-4] δ -HCH/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site): 7/20 (Missing value: 0)
Detection Frequency (sample): 7/20 (Missing value: 0)

Detection limit : 2 Quantification limit : 4

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	5
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	6/16	1/1
Detection Frequency (sample)	0/3	6/16	1/1
Geometric mean	nd	nd	
Median	nd	nd	
Maximum	nd	5	4
Minimum	nd	nd	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
	Iwate Pref.	2	Yamada Bay	Greenling	tr(2)
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	tr(3)
	Tokyo Met.	5	Tokyo Bay	Sea bass	tr(3)
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	nd
	Nagoya City	7	Nagoya Port	Striped mullet	tr(3)
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
•	Osaka Pref.	9	Osaka Bay	Sea bass	5
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	4
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	nd
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	4
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	33
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	35
		value		Egg of Great Cormorant (Egg white)	tr(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 (B $_{\mbox{\scriptsize \sc i}}$ - B r_{10}) /wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 12/20 (Missing value : 0) Detection Frequency (sample) : 12/20 (Missing value : 0)

Detection limit: **120 Quantification limit: **330

	Aggregated value
Geometric mean	tr(150)
Median	tr(140)
Maximum	1,400
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	10/16	1/1
Detection Frequency (sample)	1/3	10/16	1/1
Geometric mean	nd	tr(140)	
Median	nd	tr(140)	
Maximum	410	670	1,400
Minimum	nd	nd	1,400

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	410
•	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	tr(140)
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	tr(140)
	Tokyo Met.	5	Tokyo Bay	Sea bass	tr(270)
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	tr(130)
	Nagoya City	7	Nagoya Port	Striped mullet	tr(150)
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	470
•	Osaka Pref.	9	Osaka Bay	Sea bass	390
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	tr(270)
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(180)
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	670
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	1,400
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	88,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	94,000
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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 congeners.

[14-1] Tetrabromodiphenyl ethers/wildlife (pg/g-wet)

Monitored year: 2019

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

Detection limit: 7 Quantification limit: 18

	Aggregated value
Geometric mean	54
Median	62
Maximum	210
Minimum	tr(10)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	26	57	
Median	tr(17)	62	
Maximum	68	210	210
Minimum	tr(15)	tr(10)	210

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(17)
	Yokohama City	2	Yokohama Port	Blue mussel	68
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(15)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(10)
	Iwate Pref.	2	Yamada Bay	Greenling	89
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	29
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	58
	Tokyo Met.	5	Tokyo Bay	Sea bass	130
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	60
	Nagoya City	7	Nagoya Port	Striped mullet	63
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	210
	Osaka Pref.	9	Osaka Bay	Sea bass	210
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	130
	Tottori Pref.	11	Nakaumi	Sea bass	24
	Hiroshima City	12	Hiroshima Bay	Sea bass	77
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(11)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	120
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	26
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	41
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	210
	Yamanashi Pref.	Reference	8 /	Egg of Great Cormorant (Egg yolk)	15,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	43
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	23,000
		value		Egg of Great Cormorant (Egg white)	36

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

Detection frequency (sample) is based on the number of samples, 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) /wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site): 19/20 (Missing value: 0)
Detection Frequency (sample): 19/20 (Missing value: 0)

Detection limit: 7 Quantification limit: 18

	Aggregated value
Geometric mean	35
Median	44
Maximum	150
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	15/16	1/1
Detection Frequency (sample)	3/3	15/16	1/1
Geometric mean	tr(16)	37	
Median	tr(11)	48	
Maximum	44	150	130
Minimum	tr(9)	nd	130

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	tr(9)
	Yokohama City	2	Yokohama Port	Blue mussel	44
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(11)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	72
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	24
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	27
	Tokyo Met.	5	Tokyo Bay	Sea bass	97
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	44
	Nagoya City	7	Nagoya Port	Striped mullet	51
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	150
	Osaka Pref.	9	Osaka Bay	Sea bass	130
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	87
	Tottori Pref.	11	Nakaumi	Sea bass	tr(14)
	Hiroshima City	12	Hiroshima Bay	Sea bass	52
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(7)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	58
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	tr(16)
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	40
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	130
-	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	14,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	38
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	23,000
		value		Egg of Great Cormorant (Egg white)	33

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

Detection frequency (sample) is based on the number of samples, 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: 2019

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

Detection limit : 4 Quantification limit : 10

	Aggregated value
Geometric mean	18
Median	18
Maximum	150
Minimum	tr(4)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	12	17	
Median	12	18	
Maximum	28	58	150
Minimum	tr(5)	tr(4)	150

	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	28
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	12
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(8)
	Iwate Pref.	2	Yamada Bay	Greenling	18
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	14
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	30
	Tokyo Met.	5	Tokyo Bay	Sea bass	27
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	17
	Nagoya City	7	Nagoya Port	Striped mullet	11
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	58
	Osaka Pref.	9	Osaka Bay	Sea bass	47
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	34
	Tottori Pref.	11	Nakaumi	Sea bass	tr(7)
	Hiroshima City	12	Hiroshima Bay	Sea bass	18
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(4)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	56
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	tr(6)
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(9)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	150
	Yamanashi Pref.		8 ,	Egg of Great Cormorant (Egg yolk)	15,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	11
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	13,000
		value		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.

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

Monitored year: 2019

Detection Frequency (site): 7/20 (Missing value: 0)
Detection Frequency (sample): 7/20 (Missing value: 0)

Detection limit : 4 Quantification limit : 10

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	19
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	4/16	1/1
Detection Frequency (sample)	2/3	4/16	1/1
Geometric mean	tr(6)	nd	
Median	tr(5)	nd	
Maximum	19	13	tr(7)
Minimum	nd	nd	tr(7)

	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	19
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(5)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	tr(6)
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	tr(8)
	Tokyo Met.	5	Tokyo Bay	Sea bass	tr(5)
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	nd
	Nagoya City	7	Nagoya Port	Striped mullet	nd
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	9	Osaka Bay	Sea bass	13
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	nd
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	tr(7)
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	790
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	2,900
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site): 18/20 (Missing value: 0)
Detection Frequency (sample): 18/20 (Missing value: 0)

Detection limit: 8

Quantification limit: 21

	Aggregated value
Geometric mean	36
Median	38
Maximum	480
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	16/16	1/1
Detection Frequency (sample)	1/3	16/16	1/1
Geometric mean	nd	42	
Median	nd	40	
Maximum	24	290	480
Minimum	nd	tr(12)	480

	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	24
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(13)
	Iwate Pref.	2	Yamada Bay	Greenling	34
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	39
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	41
	Tokyo Met.	5	Tokyo Bay	Sea bass	80
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	37
	Nagoya City	7	Nagoya Port	Striped mullet	41
•	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	170
•	Osaka Pref.	9	Osaka Bay	Sea bass	78
•	Hyogo Pref.	10	Offshore of Himeji	Sea bass	87
	Tottori Pref.	11	Nakaumi	Sea bass	tr(15)
	Hiroshima City	12	Hiroshima Bay	Sea bass	54
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(18)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	290
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	tr(16)
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(12)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	480
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	32,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(19)
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	33,000
		value		Egg of Great Cormorant (Egg white)	tr(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.

[14-3-1] 2,2',4,4',5,5'-Hexabromodiphenyl ether (#153) /wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site): 3/20 (Missing value: 0) Detection Frequency (sample): 3/20 (Missing value: 0)

Detection limit: 8

Quantification limit: 21

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	58
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	2/16	1/1
Detection Frequency (sample)	0/3	2/16	1/1
Geometric mean	nd	nd	
Median	nd	nd	
Maximum	nd	21	58
Minimum	nd	nd	58

	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
	Iwate Pref.	2	Yamada Bay	Greenling	nd
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	5	Tokyo Bay	Sea bass	nd
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	nd
	Nagoya City	7	Nagoya Port	Striped mullet	nd
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	21
	Osaka Pref.	9	Osaka Bay	Sea bass	tr(12)
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	nd
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	58
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	7,300
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	10,000
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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'-Hexabromodiphenyl ether (#154) /wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 12/20 (Missing value : 0) Detection Frequency (sample) : 12/20 (Missing value : 0)

Detection limit: 8

Quantification limit: 21

	Aggregated value
Geometric mean	tr(12)
Median	tr(12)
Maximum	280
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	11/16	1/1
Detection Frequency (sample)	0/3	11/16	1/1
Geometric mean	nd	tr(12)	
Median	nd	tr(13)	
Maximum	nd	79	280
Minimum	nd	nd	280

	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
	Iwate Pref.	2	Yamada Bay	Greenling	tr(15)
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	tr(14)
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	tr(20)
•	Tokyo Met.	5	Tokyo Bay	Sea bass	21
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	tr(11)
•	Nagoya City	7	Nagoya Port	Striped mullet	tr(11)
•	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	56
	Osaka Pref.	9	Osaka Bay	Sea bass	tr(12)
•	Hyogo Pref.	10	Offshore of Himeji	Sea bass	24
	Tottori Pref.	11	Nakaumi	Sea bass	nd
•	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(13)
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
•	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	79
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	280
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	15,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(11)
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	11,000
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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: 2019

Detection Frequency (site): 11/20 (Missing value: 0)
Detection Frequency (sample): 11/20 (Missing value: 0)

Detection limit: 9 Quantification limit: 24

	Aggregated value
Geometric mean	tr(11)
Median	tr(10)
Maximum	260
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	9/16	1/1
Detection Frequency (sample)	1/3	9/16	1/1
Geometric mean	nd	tr(10)	
Median	nd	tr(10)	
Maximum	tr(18)	82	260
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(18)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	nd
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	tr(12)
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	tr(9)
	Tokyo Met.	5	Tokyo Bay	Sea bass	nd
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	tr(10)
	Nagoya City	7	Nagoya Port	Striped mullet	25
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	tr(23)
	Osaka Pref.	9	Osaka Bay	Sea bass	30
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	tr(15)
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(17)
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	82
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	260
-	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	12,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	14,000
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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-Heptabromodiphenyl ether (#175) /wildlife (pg/g-wet) and [14-4-2] 2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183) /wildlife (pg/g-wet)

Monitored year: 2019

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

Detection limit: 9 Quantification limit: 24

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	0/16	0/1
Detection Frequency (sample)	0/3	0/16	0/1
Geometric mean	nd	nd	
Median	nd	nd	
Maximum	nd	nd	nd
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	nd
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	5	Tokyo Bay	Sea bass	nd
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	nd
	Nagoya City	7	Nagoya Port	Striped mullet	nd
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	9	Osaka Bay	Sea bass	nd
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	nd
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	550
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	500
		value		Egg of Great Cormorant (Egg white)	nd

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

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

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

[14-5] Octabromodiphenyl ethers/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 10/20 (Missing value : 0)
Detection Frequency (sample) : 10/20 (Missing value : 0)

Detection limit: 7 Quantification limit: 17

	Aggregated value
Geometric mean	tr(9)
Median	nd
Maximum	330
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	8/16	1/1
Detection Frequency (sample)	1/3	8/16	1/1
Geometric mean	tr(8)	tr(8)	
Median	nd	nd	
Maximum	39	120	330
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	39
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	nd
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	5	Tokyo Bay	Sea bass	tr(14)
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	tr(9)
	Nagoya City	7	Nagoya Port	Striped mullet	tr(13)
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	tr(9)
	Osaka Pref.	9	Osaka Bay	Sea bass	23
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	tr(8)
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	18
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	120
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	330
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	13,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	10,000
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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: 2019

Detection Frequency (site): 1/20 (Missing value: 0) Detection Frequency (sample): 1/20 (Missing value: 0)

Detection limit : 20 Quantification limit : 50

	Aggregated value
	Aggregated value
Geometric mean	nd
Median	nd
Maximum	81
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	0/16	0/1
Detection Frequency (sample)	1/3	0/16	0/1
Geometric mean	tr(20)	nd	
Median	nd	nd	
Maximum	81	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	81
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	nd
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	5	Tokyo Bay	Sea bass	nd
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	nd
	Nagoya City	7	Nagoya Port	Striped mullet	nd
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	9	Osaka Bay	Sea bass	nd
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	nd
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	450
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	370
		value		Egg of Great Cormorant (Egg white)	nd

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

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

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

[14-7] Decabromodiphenyl ether/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site): 1/20 (Missing value: 0) Detection Frequency (sample): 1/20 (Missing value: 0)

Detection limit: 70 Quantification limit: 190

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

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	0/16	0/1
Detection Frequency (sample)	1/3	0/16	0/1
Geometric mean	nd	nd	
Median	nd	nd	
Maximum	tr(180)	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	tr(180)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	nd
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	5	Tokyo Bay	Sea bass	nd
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	nd
•	Nagoya City	7	Nagoya Port	Striped mullet	nd
•	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
•	Osaka Pref.	9	Osaka Bay	Sea bass	nd
•	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	nd
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
•	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	650
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	690
		value		Egg of Great Cormorant (Egg white)	nd

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

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

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

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

[15] Perfluorooctane sulfonic acid (PFOS) /wildlife (pg/g-wet)

Monitored year: 2019

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

Detection limit : 2 Quantification limit : 6

	Aggregated value
Geometric mean	55
Median	80
Maximum	3,600
Minimum	tr(2)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	10	67	
Median	tr(4)	80	
Maximum	140	3,600	360
Minimum	tr(2)	tr(3)	360

	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	140
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(4)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	6
	Iwate Pref.	2	Yamada Bay	Greenling	tr(4)
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	19
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	15
	Tokyo Met.	5	Tokyo Bay	Sea bass	420
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	390
	Nagoya City	7	Nagoya Port	Striped mullet	86
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	3,600
	Osaka Pref.	9	Osaka Bay	Sea bass	250
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	190
	Tottori Pref.	11	Nakaumi	Sea bass	160
	Hiroshima City	12	Hiroshima Bay	Sea bass	68
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	73
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	90
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	51
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(3)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	360
	Yamanashi Pref.		2 ,	Egg of Great Cormorant (Egg yolk)	50,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	290
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	94,000
		value		Egg of Great Cormorant (Egg white)	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.

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

[16] Perfluorooctanoic acid (PFOA) /wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 16/20 (Missing value : 0)
Detection Frequency (sample) : 16/20 (Missing value : 0)

Detection limit : 2 Quantification limit : 6

	Aggregated value
Geometric mean	tr(4)
Median	tr(3)
Maximum	27
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	12/16	1/1
Detection Frequency (sample)	3/3	12/16	1/1
Geometric mean	tr(3)	tr(3)	
Median	tr(4)	tr(3)	
Maximum	tr(5)	18	27
Minimum	tr(2)	nd	27

	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	tr(5)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(4)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	6
	Iwate Pref.	2	Yamada Bay	Greenling	8
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	18
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	tr(3)
	Tokyo Met.	5	Tokyo Bay	Sea bass	tr(4)
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	tr(3)
	Nagoya City	7	Nagoya Port	Striped mullet	tr(3)
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	9
	Osaka Pref.	9	Osaka Bay	Sea bass	tr(3)
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(2)
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(2)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	8
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	27
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	330
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(4)
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	2,500
		value		Egg of Great Cormorant (Egg white)	23

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

Detection frequency (sample) is based on the number of samples, 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: 2019

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

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	21
Median	16
Maximum	470
Minimum	3

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	10	20	
Median	11	19	
Maximum	14	280	470
Minimum	7	3	470

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	11
	Yokohama City	2	Yokohama Port	Blue mussel	7
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	14
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	20
	Iwate Pref.	2	Yamada Bay	Greenling	43
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	7
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	140
	Tokyo Met.	5	Tokyo Bay	Sea bass	280
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	40
	Nagoya City	7	Nagoya Port	Striped mullet	39
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	41
•	Osaka Pref.	9	Osaka Bay	Sea bass	88
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	17
	Tottori Pref.	11	Nakaumi	Sea bass	4
	Hiroshima City	12	Hiroshima Bay	Sea bass	15
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	4
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	7
•	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	3
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	7
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	470
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	6,200
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	16
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	5,900
		value		Egg of Great Cormorant (Egg white)	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).

[19] 1,2,5,6,9,10-Hexabromocyclododecanes/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 15/20 (Missing value : 0) Detection Frequency (sample) : 15/20 (Missing value : 0)

 $\begin{aligned} & \text{Detection limit}: \& 27 \\ & \text{Quantification limit}: \& 70 \end{aligned}$

	Aggregated value
Geometric mean	110
Median	140
Maximum	1,100
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	11/16	1/1
Detection Frequency (sample)	3/3	11/16	1/1
Geometric mean	180	89	
Median	170	110	
Maximum	420	1,000	1,100
Minimum	81	nd	1,100

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	81
	Yokohama City	2	Yokohama Port	Blue mussel	420
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	170
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	84
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	360
	Tokyo Met.	5	Tokyo Bay	Sea bass	330
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	100
	Nagoya City	7	Nagoya Port	Striped mullet	120
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	390
	Osaka Pref.	9	Osaka Bay	Sea bass	330
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	1,000
	Tottori Pref.	11	Nakaumi	Sea bass	tr(48)
	Hiroshima City	12	Hiroshima Bay	Sea bass	160
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	310
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	1,100
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	56,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	110
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	44,000
		value		Egg of Great Cormorant (Egg white)	190

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

Detection frequency (sample) is based on the number of samples, 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) \ast : Indicates the sum value of the Quantification [Detection] limits of each isomers.

[19-1] α -1,2,5,6,9,10-Hexabromocyclododecane/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site): 19/20 (Missing value: 0)
Detection Frequency (sample): 19/20 (Missing value: 0)

Detection limit: 9 Quantification limit: 24

	Aggregated value
Geometric mean	98
Median	120
Maximum	1,100
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	15/16	1/1
Detection Frequency (sample)	3/3	15/16	1/1
Geometric mean	140	79	
Median	150	92	
Maximum	260	980	1,100
Minimum	68	nd	1,100

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	68
	Yokohama City	2	Yokohama Port	Blue mussel	260
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	150
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(15)
	Iwate Pref.	2	Yamada Bay	Greenling	84
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	tr(13)
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	350
	Tokyo Met.	5	Tokyo Bay	Sea bass	300
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	77
	Nagoya City	7	Nagoya Port	Striped mullet	100
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	370
	Osaka Pref.	9	Osaka Bay	Sea bass	270
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	980
	Tottori Pref.	11	Nakaumi	Sea bass	48
	Hiroshima City	12	Hiroshima Bay	Sea bass	130
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	300
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	tr(9)
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	24
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	1,100
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	54,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	110
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	43,000
		value		Egg of Great Cormorant (Egg white)	190

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

Detection frequency (sample) is based on the number of samples, 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.

[19-2] β -1,2,5,6,9,10-Hexabromocyclododecane/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site): 1/20 (Missing value: 0) Detection Frequency (sample): 1/20 (Missing value: 0)

Detection limit: 9 Quantification limit: 24

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(22)
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	0/16	0/1
Detection Frequency (sample)	1/3	0/16	0/1
Geometric mean	nd	nd	
Median	nd	nd	
Maximum	tr(22)	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	tr(22)
•	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
•	Iwate Pref.	2	Yamada Bay	Greenling	nd
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
•	Tokyo Met.	5	Tokyo Bay	Sea bass	nd
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	nd
•	Nagoya City	7	Nagoya Port	Striped mullet	nd
•	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
•	Osaka Pref.	9	Osaka Bay	Sea bass	nd
•	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	11	Nakaumi	Sea bass	nd
•	Hiroshima City	12	Hiroshima Bay	Sea bass	nd
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
•	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
•	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	nd
•	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	nd
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		value		Egg of Great Cormorant (Egg white)	nd

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

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

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

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

[19-3] γ -1,2,5,6,9,10-Hexabromocyclododecane/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site): 12/20 (Missing value: 0) Detection Frequency (sample): 12/20 (Missing value: 0)

Detection limit: 9 Quantification limit: 22

	Aggregated value
Geometric mean	tr(13)
Median	tr(13)
Maximum	140
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	9/16	0/1
Detection Frequency (sample)	3/3	9/16	0/1
Geometric mean	34	tr(12)	
Median	22	tr(13)	
Maximum	140	62	nd
Minimum	tr(13)	nd	nd

	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	140
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	22
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	nd
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	tr(13)
	Tokyo Met.	5	Tokyo Bay	Sea bass	30
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	26
	Nagoya City	7	Nagoya Port	Striped mullet	tr(20)
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	23
	Osaka Pref.	9	Osaka Bay	Sea bass	62
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	27
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	34
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	tr(12)
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	2,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	940
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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: 2019

Detection Frequency (site) : 15/20 (Missing value : 0)
Detection Frequency (sample) : 15/20 (Missing value : 0)

 $\begin{aligned} & \text{Detection limit}: \& 15 \\ & \text{Quantification limit}: \& 40 \end{aligned}$

	Aggregated value
Geometric mean	53
Median	82
Maximum	820
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	12/16	1/1
Detection Frequency (sample)	2/3	12/16	1/1
Geometric mean	84	46	
Median	96	78	
Maximum	820	270	170
Minimum	nd	nd	170

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	96
	Yokohama City	2	Yokohama Port	Blue mussel	820
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	100
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	tr(20)
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	76
	Tokyo Met.	5	Tokyo Bay	Sea bass	200
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	140
	Nagoya City	7	Nagoya Port	Striped mullet	100
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	85
	Osaka Pref.	9	Osaka Bay	Sea bass	270
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	170
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	44
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	tr(19)
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	79
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	170
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	15,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	29,000
		value		Egg of Great Cormorant (Egg white)	tr(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.

(Note 4) nd: Not detected

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

[20-1] Monochlorinated naphthalenes/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site): 13/20 (Missing value: 0)
Detection Frequency (sample): 13/20 (Missing value: 0)

Detection limit : 2 Quantification limit : 4

	Aggregated value
Geometric mean	tr(3)
Median	tr(3)
Maximum	29
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	10/16	0/1
Detection Frequency (sample)	3/3	10/16	0/1
Geometric mean	4	4	
Median	tr(3)	4	
Maximum	11	29	nd
Minimum	tr(2)	nd	nd

	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	11
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(3)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	9
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	12
	Tokyo Met.	5	Tokyo Bay	Sea bass	7
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	7
	Nagoya City	7	Nagoya Port	Striped mullet	15
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
-	Osaka Pref.	9	Osaka Bay	Sea bass	29
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	6
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	5
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(3)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(2)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	4
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	9
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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] Dichlorinated naphthalenes/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 11/20 (Missing value : 0) Detection Frequency (sample) : 11/20 (Missing value : 0)

Detection limit : 2 Quantification limit : 5

	Aggregated value
Geometric mean	tr(4)
Median	tr(4)
Maximum	58
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	9/16	0/1
Detection Frequency (sample)	2/3	9/16	0/1
Geometric mean	7	tr(4)	
Median	5	5	
Maximum	58	26	nd
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	5
	Yokohama City	2	Yokohama Port	Blue mussel	58
•	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
•	Iwate Pref.	2	Yamada Bay	Greenling	21
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	26
•	Tokyo Met.	5	Tokyo Bay	Sea bass	14
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	11
•	Nagoya City	7	Nagoya Port	Striped mullet	11
•	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
•	Osaka Pref.	9	Osaka Bay	Sea bass	24
•	Hyogo Pref.	10	Offshore of Himeji	Sea bass	20
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	7
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
•	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(3)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	tr(4)
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	5
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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] Trichlorinated naphthalenes/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 12/20 (Missing value : 0) Detection Frequency (sample) : 12/20 (Missing value : 0)

Detection limit : 2 Quantification limit : 5

	Aggregated value
Geometric mean	tr(4)
Median	tr(2)
Maximum	180
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	9/16	1/1
Detection Frequency (sample)	2/3	9/16	1/1
Geometric mean	17	tr(3)	
Median	26	tr(2)	
Maximum	180	22	tr(2)
Minimum	nd	nd	tr(2)

	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	180
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	9
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	8
	Tokyo Met.	5	Tokyo Bay	Sea bass	22
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	16
	Nagoya City	7	Nagoya Port	Striped mullet	11
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	tr(2)
	Osaka Pref.	9	Osaka Bay	Sea bass	22
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	9
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(3)
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	tr(2)
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	35
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	110
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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] Tetrachlorinated naphthalenes/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 18/20 (Missing value : 0) Detection Frequency (sample) : 18/20 (Missing value : 0)

Detection limit : 2 Quantification limit : 6

	Aggregated value
Geometric mean	18
Median	31
Maximum	380
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	2/3	15/16	1/1
Detection Frequency (sample)	2/3	15/16	1/1
Geometric mean	26	15	
Median	48	23	
Maximum	380	96	66
Minimum	nd	nd	66

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	48
	Yokohama City	2	Yokohama Port	Blue mussel	380
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	30
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	6
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	13
	Tokyo Met.	5	Tokyo Bay	Sea bass	80
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	52
	Nagoya City	7	Nagoya Port	Striped mullet	38
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	31
-	Osaka Pref.	9	Osaka Bay	Sea bass	96
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	75
	Tottori Pref.	11	Nakaumi	Sea bass	tr(4)
	Hiroshima City	12	Hiroshima Bay	Sea bass	16
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(3)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	tr(5)
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	tr(4)
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	35
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	66
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	7,100
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(2)
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	15,000
		value		Egg of Great Cormorant (Egg white)	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.

[20-5] Pentachlorinated naphthalenes/wildlife (pg/g-wet)

Monitored year: 2019

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

Detection limit : 2 Quantification limit : 6

	Aggregated value
Geometric mean	18
Median	19
Maximum	170
Minimum	tr(2)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	17	17	
Median	15	19	
Maximum	170	76	68
Minimum	tr(2)	tr(3)	68

	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	170
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(2)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(3)
	Iwate Pref.	2	Yamada Bay	Greenling	28
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	10
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	16
	Tokyo Met.	5	Tokyo Bay	Sea bass	57
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	37
	Nagoya City	7	Nagoya Port	Striped mullet	22
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	46
	Osaka Pref.	9	Osaka Bay	Sea bass	76
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	56
	Tottori Pref.	11	Nakaumi	Sea bass	tr(4)
	Hiroshima City	12	Hiroshima Bay	Sea bass	11
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(4)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	12
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	6
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	36
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	68
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	6,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(2)
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	9,400
		value		Egg of Great Cormorant (Egg white)	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.

[20-6] Hexachlorinated naphthalenes/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 16/20 (Missing value : 0)
Detection Frequency (sample) : 16/20 (Missing value : 0)

Detection limit : 1 Quantification limit : 4

	Aggregated value
Geometric mean	tr(3)
Median	tr(3)
Maximum	35
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	14/16	1/1
Detection Frequency (sample)	1/3	14/16	1/1
Geometric mean	tr(2)	tr(3)	
Median	nd	tr(3)	
Maximum	16	21	35
Minimum	nd	nd	35

	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	16
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(1)
	Iwate Pref.	2	Yamada Bay	Greenling	4
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	4
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	tr(1)
	Tokyo Met.	5	Tokyo Bay	Sea bass	15
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	14
	Nagoya City	7	Nagoya Port	Striped mullet	tr(3)
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	6
	Osaka Pref.	9	Osaka Bay	Sea bass	21
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	8
	Tottori Pref.	11	Nakaumi	Sea bass	tr(1)
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(2)
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	tr(2)
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(3)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	35
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	1,400
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(1)
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	4,600
		value		Egg of Great Cormorant (Egg white)	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.

[20-7] Heptachlorinated naphthalenes/wildlife (pg/g-wet)

Monitored year: 2019

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

Detection limit : 2 Quantification limit : 4

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	0/16	0/1
Detection Frequency (sample)	0/3	0/16	0/1
Geometric mean	nd	nd	
Median	nd	nd	
Maximum	nd	nd	nd
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	nd
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	5	Tokyo Bay	Sea bass	nd
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	nd
	Nagoya City	7	Nagoya Port	Striped mullet	nd
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
•	Osaka Pref.	9	Osaka Bay	Sea bass	nd
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	nd
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
•	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	Reference	2 ,	Egg of Great Cormorant (Egg yolk)	12
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	46
		value		Egg of Great Cormorant (Egg white)	nd

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

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

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

[20-8] Octachlorinated naphthalene/wildlife (pg/g-wet)

Monitored year: 2019

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

Detection limit : 2 Quantification limit : 6

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	nd
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	0/16	0/1
Detection Frequency (sample)	0/3	0/16	0/1
Geometric mean	nd	nd	
Median	nd	nd	
Maximum	nd	nd	nd
Minimum	nd	nd	nd

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	nd
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	nd
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	5	Tokyo Bay	Sea bass	nd
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	nd
	Nagoya City	7	Nagoya Port	Striped mullet	nd
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
•	Osaka Pref.	9	Osaka Bay	Sea bass	nd
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	nd
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
•	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	nd
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	nd
		value		Egg of Great Cormorant (Egg white)	nd

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

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

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

[22] Pentachlorophenol and its salts and esters/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site): 19/20 (Missing value: 0)
Detection Frequency (sample): 19/20 (Missing value: 0)

 $\begin{aligned} & \text{Detection limit}: \% \, 5 \\ & \text{Quantification limit}: \% \, 13 \end{aligned}$

	Aggregated value
Geometric mean	29
Median	31
Maximum	520
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	15/16	1/1
Detection Frequency (sample)	3/3	15/16	1/1
Geometric mean	31	24	
Median	28	31	
Maximum	69	120	520
Minimum	15	nd	520

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	28
	Yokohama City	2	Yokohama Port	Blue mussel	69
•	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	15
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	33
•	Iwate Pref.	2	Yamada Bay	Greenling	nd
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	15
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	20
•	Tokyo Met.	5	Tokyo Bay	Sea bass	120
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	36
•	Nagoya City	7	Nagoya Port	Striped mullet	70
•	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	33
•	Osaka Pref.	9	Osaka Bay	Sea bass	73
•	Hyogo Pref.	10	Offshore of Himeji	Sea bass	42
	Tottori Pref.	11	Nakaumi	Sea bass	23
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(5)
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	28
•	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	34
•	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	22
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(9)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	520
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	2,000
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	46
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	2,100
		value		Egg of Great Cormorant (Egg white)	88

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

Detection frequency (sample) is based on the number of samples, 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

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

[22-1] Pentachlorophenol/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 18/20 (Missing value : 0) Detection Frequency (sample) : 18/20 (Missing value : 0)

Detection limit : 4 Quantification limit : 10

	Aggregated value
Geometric mean	21
Median	22
Maximum	430
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	14/16	1/1
Detection Frequency (sample)	3/3	14/16	1/1
Geometric mean	26	17	
Median	26	22	
Maximum	54	57	430
Minimum	13	nd	430

	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	54
•	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	13
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	32
•	Iwate Pref.	2	Yamada Bay	Greenling	nd
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	13
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	11
•	Tokyo Met.	5	Tokyo Bay	Sea bass	57
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	22
•	Nagoya City	7	Nagoya Port	Striped mullet	54
•	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	20
•	Osaka Pref.	9	Osaka Bay	Sea bass	32
•	Hyogo Pref.	10	Offshore of Himeji	Sea bass	24
	Tottori Pref.	11	Nakaumi	Sea bass	21
	Hiroshima City	12	Hiroshima Bay	Sea bass	nd
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	22
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	33
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	21
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(7)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	430
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	1,600
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	44
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,400
		value		Egg of Great Cormorant (Egg white)	88

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

Detection frequency (sample) is based on the number of samples, 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: 2019

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

Detection limit: 1 Quantification limit: 3

	Aggregated value
Geometric mean	6
Median	6
Maximum	91
Minimum	tr(1)

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	16/16	1/1
Detection Frequency (sample)	3/3	16/16	1/1
Geometric mean	4	5	
Median	tr(2)	6	
Maximum	15	59	91
Minimum	tr(2)	tr(1)	91

	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	15
•	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(2)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(1)
•	Iwate Pref.	2	Yamada Bay	Greenling	tr(1)
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	tr(2)
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	9
•	Tokyo Met.	5	Tokyo Bay	Sea bass	59
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	14
•	Nagoya City	7	Nagoya Port	Striped mullet	16
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	13
	Osaka Pref.	9	Osaka Bay	Sea bass	41
•	Hyogo Pref.	10	Offshore of Himeji	Sea bass	18
	Tottori Pref.	11	Nakaumi	Sea bass	tr(2)
	Hiroshima City	12	Hiroshima Bay	Sea bass	5
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	6
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	tr(1)
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	tr(1)
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(2)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	91
	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	430
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(2)
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	710
		value		Egg of Great Cormorant (Egg white)	nd

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

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

⁽Note 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: 2019

Detection Frequency (site): 6/20 (Missing value: 0)
Detection Frequency (sample): 6/20 (Missing value: 0)

Detection limit : $\times 1,200$ Quantification limit : $\times 3,000$

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	3,800
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	4/16	1/1
Detection Frequency (sample)	1/3	4/16	1/1
Geometric mean	nd	nd	
Median	nd	nd	
Maximum	tr(1,700)	3,700	3,800
Minimum	nd	nd	3,800

	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(1,700)
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	tr(2,400)
	Iwate Pref.	2	Yamada Bay	Greenling	nd
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	5	Tokyo Bay	Sea bass	3,700
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	nd
	Nagoya City	7	Nagoya Port	Striped mullet	nd
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
-	Osaka Pref.	9	Osaka Bay	Sea bass	nd
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	11	Nakaumi	Sea bass	nd
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(2,000)
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(1,500)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	3,800
-	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	6,600
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	8,100
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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 congeners.

[23-1] Chlorinated decanes/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site): 6/20 (Missing value: 0)
Detection Frequency (sample): 6/20 (Missing value: 0)

Detection limit : 300 Quantification limit : 900

	A composted value
	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(700)
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	5/16	1/1
Detection Frequency (sample)	0/3	5/16	1/1
Geometric mean	nd	nd	
Median	nd	nd	
Maximum	nd	tr(700)	tr(600)
Minimum	nd	nd	tr(600)

	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(500)
•	Iwate Pref.	2	Yamada Bay	Greenling	nd
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
•	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
•	Tokyo Met.	5	Tokyo Bay	Sea bass	tr(400)
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	tr(300)
•	Nagoya City	7	Nagoya Port	Striped mullet	nd
•	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
•	Osaka Pref.	9	Osaka Bay	Sea bass	nd
•	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
•	Tottori Pref.	11	Nakaumi	Sea bass	nd
•	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(700)
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(400)
•	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
•	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	tr(600)
•	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	tr(400)
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	tr(300)
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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: 2019

Detection Frequency (site) : 13/20 (Missing value : 0) Detection Frequency (sample) : 13/20 (Missing value : 0)

Detection limit : 200 Quantification limit : 500

	Aggregated value
Geometric mean	tr(300)
Median	tr(400)
Maximum	1,400
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	11/16	1/1
Detection Frequency (sample)	1/3	11/16	1/1
Geometric mean	nd	tr(300)	
Median	nd	tr(400)	
Maximum	600	1,100	1,400
Minimum	nd	nd	1,400

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	nd
	Yokohama City	2	Yokohama Port	Blue mussel	600
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	600
	Iwate Pref.	2	Yamada Bay	Greenling	nd
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	5	Tokyo Bay	Sea bass	1,100
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	tr(400)
	Nagoya City	7	Nagoya Port	Striped mullet	500
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	tr(300)
	Osaka Pref.	9	Osaka Bay	Sea bass	tr(200)
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	11	Nakaumi	Sea bass	600
	Hiroshima City	12	Hiroshima Bay	Sea bass	1,100
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	900
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	tr(200)
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	700
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	1,400
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	1,500
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(200)
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	1,500
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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: 2019

Detection Frequency (site): 3/20 (Missing value: 0)
Detection Frequency (sample): 3/20 (Missing value: 0)

Detection limit : 500 Quantification limit : 1,200

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

	Bibalves	Fish	Birds
Detection Frequency (site)	0/3	2/16	1/1
Detection Frequency (sample)	0/3	2/16	1/1
Geometric mean	nd	nd	
Median	nd	nd	
Maximum	nd	tr(900)	tr(500)
Minimum	nd	nd	tr(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(500)
•	Iwate Pref.	2	Yamada Bay	Greenling	nd
•	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
•	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
•	Tokyo Met.	5	Tokyo Bay	Sea bass	tr(900)
•	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	nd
•	Nagoya City	7	Nagoya Port	Striped mullet	nd
•	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	nd
	Osaka Pref.	9	Osaka Bay	Sea bass	nd
•	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
•	Tottori Pref.	11	Nakaumi	Sea bass	nd
•	Hiroshima City	12	Hiroshima Bay	Sea bass	nd
•	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	nd
•	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	nd
•	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	nd
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	tr(500)
•	Yamanashi Pref.	Reference	Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	2,300
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	nd
	Hyogo Pref.	Reference	Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	2,900
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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/wildlife (pg/g-wet)

Monitored year: 2019

Detection Frequency (site) : 15/20 (Missing value : 0)
Detection Frequency (sample) : 15/20 (Missing value : 0)

Detection limit : 200 Quantification limit : 400

	Aggregated value
Geometric mean	tr(300)
Median	tr(200)
Maximum	1,300
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	3/3	11/16	1/1
Detection Frequency (sample)	3/3	11/16	1/1
Geometric mean	500	tr(200)	
Median	400	tr(200)	
Maximum	1,100	1,300	1,300
Minimum	tr(300)	nd	1,300

	Local communities	No.	Monitored sites	Wildlife species	Measured value
Bibalves	Iwate Pref.	1	Yamada Bay	Blue mussel	400
	Yokohama City	2	Yokohama Port	Blue mussel	1,100
	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	tr(300)
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	800
	Iwate Pref.	2	Yamada Bay	Greenling	tr(200)
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	tr(300)
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	5	Tokyo Bay	Sea bass	1,300
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	nd
	Nagoya City	7	Nagoya Port	Striped mullet	tr(300)
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	tr(200)
	Osaka Pref.	9	Osaka Bay	Sea bass	nd
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	nd
	Tottori Pref.	11	Nakaumi	Sea bass	tr(200)
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(200)
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	tr(200)
	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	tr(300)
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	tr(200)
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	nd
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	1,300
	Yamanashi Pref.		8 ,	Egg of Great Cormorant (Egg yolk)	2,400
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	400
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	3,400
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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: 2019

Detection Frequency (site): 13/20 (Missing value: 0)
Detection Frequency (sample): 13/20 (Missing value: 0)

Detection limit: 10 Quantification limit: 30

	Aggregated value
Geometric mean	tr(10)
Median	tr(10)
Maximum	120
Minimum	nd

	Bibalves	Fish	Birds
Detection Frequency (site)	1/3	12/16	0/1
Detection Frequency (sample)	1/3	12/16	0/1
Geometric mean	nd	tr(10)	
Median	nd	tr(10)	
Maximum	tr(10)	120	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(10)
•	Ishikawa Pref.	3	Coast of Noto Peninsula	Blue mussel	nd
Fish	Hokkaido	1	Offshore of Kushiro	Rock greenling	nd
	Iwate Pref.	2	Yamada Bay	Greenling	nd
	Miyagi Pref.	3	Sendai Bay (Matsushima Bay)	Greenling	nd
	Ibaraki Pref.	4	Offshore of Joban	Chub mackerel	nd
	Tokyo Met.	5	Tokyo Bay	Sea bass	tr(10)
	Kawasaki City	6	Offshore of Ogishima Island,	Sea bass	tr(10)
	Nagoya City	7	Nagoya Port	Striped mullet	tr(20)
	Shiga Pref.	8	Lake Biwa, Riv. Ado	Dace	tr(10)
	Osaka Pref.	9	Osaka Bay	Sea bass	40
	Hyogo Pref.	10	Offshore of Himeji	Sea bass	120
	Tottori Pref.	11	Nakaumi	Sea bass	tr(10)
	Hiroshima City	12	Hiroshima Bay	Sea bass	tr(10)
	Kochi Pref.	13	Mouth of Riv. Shimanto	Sea bass	30
•	Oita Pref.	14	Mouth of Riv. Oita (Oita City)	Sea bass	tr(10)
	Kagoshima Pref.	15	West Coast of Satsuma Peninsula	Sea bass	100
	Okinawa Pref.	16	Nakagusuku Bay	Okinawa seabeam	tr(10)
Birds	Tottori Pref.	1	Riv.Tenjin(Kurayoshi City)	Great Cormorant	nd
	Yamanashi Pref.		Shimosone-bashi Bridge, Riv. Fuefuki	Egg of Great Cormorant (Egg yolk)	190
		value	(Kofu City)	Egg of Great Cormorant (Egg white)	tr(10)
	Hyogo Pref.		Koya Pond (Itami City)	Egg of Great Cormorant (Egg yolk)	80
		value		Egg of Great Cormorant (Egg white)	nd

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

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

(Note 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: 2019

Detection Frequency (site) : 61/61 (Missing value : 0)
Detection Frequency (sample) : 48/48 (Missing value : 0)

Detection limit: *3.3 Quantification limit: *12

	Aggregated value
Geometric mean	89
Median	90
Maximum	340
Minimum	27

Local communities	No.	Monitored sites		season	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	Sampling dates 10/11 - 10/18	Measured value	MV
поккано	1	Kamikawa General Subprefectural Bureau (Asanikawa City)	10/11 - 10/18	34	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	30	HV
Баррого Спу	_	Sapporo Art I ark (Sapporo City)	10/8 - 10/9	30	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	71	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	60	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	63	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	87	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	110	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	220	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	39	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	250	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	9/26 - 9/27 10/29 - 11/5	200	MV
M., 4 B C	12	O A O I's Main in Guel Office Give	10/7 10/0	64	1137
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	64	HV
			10/8 - 10/9 10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/9 - 10/10	150	HV
Toyama Tier.	13	Tonami An Quanty Mointoring Station (Tonami City)	10/16 - 10/17	130	11 V
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	33	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	140	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	73	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	68	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30 10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	150	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	74	HV
		(Yokkaichi City)	10/1 - 10/2		•
0.1.5.0	20	0.1 1:40 6 4 10 4 20 20 20 20 20 20 20 20 20 20 20 20 20	10/2 - 10/3	200	****
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	200	HV
	Ì	Annex (Osaka City)	10/6 - 10/7 10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	•
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	94	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	190	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	90	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	32	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	110	HV
-			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	160	MV
-		Environment (Yamaguchi City)			
		, ,			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	110	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	120	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
		***************************************	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	89	MV
8					
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	120	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	340	HV
1 41140114 1 1 1 1 1		Small city covermient Bullang (cinium city)	9/25 - 9/26	3.0	
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	88	MV
5 mg m 1 1 0 11		Sugar research contact (Sugar City)	<i>y,</i> 2 . 10, 1		1.1
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	110	HV
		Environmental Science (Udo City)	9/25 - 9/26	110	11 1
		Ziii ii siiii selellee (e de elty)	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	31	MV
wiiyazaki i ici.	34	Environment (Miyazaki City)	11/3 - 11/12	31	IVI V
		Divironment (miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	64	HV
Kagosiiiiia Frei.	33	and Public Health (Kagoshima City)	10/28 - 10/29	04	пν
		and I done Health (Kagoshilla City)			
Okinawa Pref.	26	Cone Hade (Vymicemi Village)	10/30 - 10/31	27	HV
Okinawa Prei.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	21	HV
			9/25 - 9/26		
			9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

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

[1-1] Monochlorobiphenyls/air (pg/m³)

Monitored year: 2019

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.02 Quantification limit: 0.06

	Aggregated value
Geometric mean	9.8
Median	9.8
Maximum	32
Minimum	1.3

Local communities	No.	Monitored sites	Warm		Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	Sampling dates 10/11 - 10/18	Measured value 7.8	MV
ноккатао	1	Kamikawa Generai Suoprefecturai Bureau (Asanikawa City)	10/11 - 10/18	7.8	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	7.5	HV
support eny	_	Support First and (Support City)	10/8 - 10/9	7.5	11.
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	8.4	HV
1		sugerm quanty momentum summer (runnum eng)	10/1 - 10/2	0	
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	4.3	MV
, 8		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	9.0	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	16	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	19	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	20	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	1.6	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	32	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	31	MV
Tokonama City		(Yokohama City)	10/29 11/3	31	111 1
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	4.6	HV
Ü			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	15	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	6.2	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	8.7	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	8.5	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	11	HV
Gilu Ffel.	1 /	Environmental Sciences (Kakamigahara City)	10/28 - 10/29	11	п٧
		Environmental selences (Kakaninganara City)	10/29 - 10/30		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	14	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	11	HV
		(Yokkaichi City)	10/1 - 10/2		
			10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	12	HV
		Annex (Osaka City)	10/6 - 10/7		
	1		10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
	110.		Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	6.2	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	13	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	11	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	5.5	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	14	HV
			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	29	MV
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	19	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	7.9	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3	1	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	15	MV
8					
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	10	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	25	HV
		, , , , , , , , , , , , , , , , , , , ,	9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	8.3	MV
Ü					
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	9.5	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	7.4	MV
, ш.ш. 1 101.	-	Environment (Miyazaki City)	11.5 11/12	,	111 1
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	5.1	HV
ragosiiiia i ici.		and Public Health (Kagoshima City)	10/29 - 10/30	J.1	11 4
		and I also Houses (Ragoninia Orty)	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	1.3	HV
Okiliawa I ICI.	30	Cape Hedo (Kumgami v mage)	9/24 - 9/23	1.5	11 V
				1	
	1		9/26 - 9/27		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

[1-2] Dichlorobiphenyls/air (pg/m³)

Monitored year: 2019

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.2 Quantification limit: 0.4

	Aggregated value
Geometric mean	26
Median	27
Maximum	73
Minimum	7.3

Local communities	No.	Monitored sites	Warm s Sampling dates	Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	9.5	MV
Hokkaido	1	Kainikawa General Suopieleetural Bureau (Asanikawa City)	10/11 - 10/18	9.3	1V1 V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	7.4	HV
виррого спу		Supporo Art Lark (Supporo City)	10/8 - 10/9	7.4	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	34	HV
Twate Tiel.	3	Sugo An Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	34	11 V
			10/1 - 10/2		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	25	MV
wiiyagi i ici.		(Sendai City)	10/4 10/11	23	IVI V
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	22	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	26	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	33	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	55	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	17	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	73	HV
S			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	56	MV
•		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	17	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	51	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	11	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	46	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	20	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	23	HV
Onu Fici.	1/	Environmental Sciences (Kakamigahara City)	10/29 - 10/29	43	11 V
		Environmental Sciences (Kakailinganara City)	10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	45	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	18	HV
		(Yokkaichi City)	10/1 - 10/2		
			10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	44	HV
		Annex (Osaka City)	10/6 - 10/7		
	I	1	10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
Local communities			Sampling dates	Measured value	All sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	19	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	49	HV
•		` */	10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	42	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	9.4	HV
51111111111		om randam revis	10/29 - 10/30	7	
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	32	HV
Tinosiiiia City	23	Throshina City Rokutaiji Julioi Trigii School (Throshina City)	9/29 - 9/30	32	11 V
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	46	MV
i amagucini Fici.	20	Environment (Yamaguchi City)	9/24 - 10/1	40	IVI V
		Environment (1 amaguem enty)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	30	MV
	21	rragi rreattii and weriare Center (rragi City)	9/24 - 10/1	30	IVI V
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	32	HV
Tokushina Prei.	20			32	пν
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
IZ D C	20	W D C (1D 11' C ' ' D 1/T 1 (C')	10/2 - 10/3	24	3.67
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	24	MV
Ehime Pref.	20	El. D.C. 1C. AND D. 1000	10/7 10/0	21	1117
Enime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	31	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	47	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	26	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	27	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	11	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	20	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
	<u> </u>		10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	7.3	HV
			9/25 - 9/26		
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

[1-3] Trichlorobiphenyls/air (pg/m³)

Monitored year : 2019

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.1 Quantification limit: 0.3

	Aggregated value
Geometric mean	24
Median	24
Maximum	72
Minimum	6.5

Local communities	No.	Monitored sites	Warm		Air sampler
Hokkaido	1	Vamiltavya Camanal Sylmmafaatiyaal Dynaay (Aaaliikayya City)	Sampling dates 10/11 - 10/18	Measured value 9.5	MV
ноккатао	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	9.3	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	6.7	HV
заррого Спу	_	Sapporo Art I ark (Sapporo City)	10/7 - 10/8	0.7	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	14	HV
Twate Tiel.	3	Sugo An Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	14	11 V
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/2 - 10/3	16	MV
mijugi i ici.		(Sendai City)	10/1 10/11	10	111 1
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	16	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	26	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	32	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	68	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	12	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	72	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	51	MV
Tononama city		(Yokohama City)	10/29 11/0		112 1
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	22	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	43	HV
•			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	8.8	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	50	HV
		Environment (Kofu City)	10/29 - 10/30		
	L		10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	20	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	19	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
	L		10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	43	MV
) (" P 0	10		0/20 10/1	20	
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	20	HV
		(Yokkaichi City)	10/1 - 10/2		
0.1.7.6	20	0.1.1.4.0.6.4.10	10/2 - 10/3		****
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	66	HV
		Annex (Osaka City)	10/6 - 10/7		
			10/7 - 10/8		

Local communities	No.	Monitored sites	Warm	season	Air sampler
	110.	Wolfitored Sites	Sampling dates	Measured value	All sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	23	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	68	HV
•		` • •	10/8 - 10/9	1	
			10/9 - 10/10	1	
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	19	HV
			11/6 - 11/7	1	
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	9.0	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	25	HV
,			9/29 - 9/30		
			9/30 - 10/1	1	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	48	MV
		Environment (Yamaguchi City)	-		
		(
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	25	MV
		riagi ricanii ana wenate center (riagi enj)	<i>3,</i> 2. 10, 1		
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	33	HV
Tokushilia Tioi.	20	Environmental Sciences Center (Tokushima City)	10/1 - 10/2		11 1
		Zinvinosimia soronoto comor (1 enuesiminu city)	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	23	MV
ragawa rici.		reagawa i refectatar i aone swimming i oor (rakamatsa oley)	10/25 10/20	23	111 1
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	34	HV
Emine 1 rei.	30	(Uwajima City)	10/8 - 10/9		11 1
		(Chajina chij)	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	57	HV
i ukuoka i ici.	31	Omata City Government Bunding (Omata City)	9/25 - 9/26	3,	11 4
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	27	MV
Saga 1 ICI.	32	Saga i refecturar Environmentar Research Center (Saga City))/2 4 - 10/1	27	1V1 V
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	34	HV
remainoto 1 ICI.))	Environmental Science (Udo City)	9/25 - 9/26	3-1	11 V
		Environmental belonce (odo city)	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	6.5	MV
IVII Y AZAKI FICI.	J4	Environment (Miyazaki City)	11/3 - 11/12	0.5	1V1 V
		Environment (wilyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	17	HV
Kagosiiina Pref.	33		10/28 - 10/29	1 /	нv
		and Public Health (Kagoshima City)			
Okinawa Pref.	26	C H 1 (K : : Will)	10/30 - 10/31	1.1	1137
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	11	HV
			9/25 - 9/26		
	ĺ		9/26 - 9/27		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

[1-4] Tetrachlorobiphenyls/air (pg/m³)

Monitored year: 2019

Detection Frequency (site) : 36/36 (Missing value : 0)
Detection Frequency (sample) : 36/36 (Missing value : 0)

Detection limit: 0.2 Quantification limit: 0.5

	Aggregated value
Geometric mean	14
Median	14
Maximum	46
Minimum	3.6

Local communities	No.	Monitored sites	Warm s		Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	Sampling dates 10/11 - 10/18	Measured value 4.3	MV
поккацо	1	Kamikawa Generai Suoprefecturai Bureau (Asamkawa City)	10/11 - 10/18	4.3	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	4.5	HV
виррого спу	_	Support fire and (Support City)	10/8 - 10/9	4.5	11 4
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	8.1	HV
Twate Tiel.		Sugo in Quanty Monitoring Station (Tukizuwa City)	10/1 - 10/2	0.1	11 1
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	7.9	MV
1111) wg. 1 1011		(Sendai City)	10/11	,,,	1.1
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	8.0	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	12	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	14	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	46	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	5.1	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	42	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	35	MV
		(Yokohama City)	20.20		
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	12	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	19	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	4.4	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	20	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	14	MV
G:0 = 2			10/00 10/00	0.6	
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	9.6	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	10/30 - 10/31 9/24 - 10/1	25	MV
- · ·					
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	14	HV
		(Yokkaichi City)	10/1 - 10/2		
			10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	43	HV
		Annex (Osaka City)	10/6 - 10/7		
	1		10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
	110.		Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	32	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	45	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	10	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	4.5	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	20	HV
			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	26	MV
		Environment (Yamaguchi City)			
		, , ,			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	22	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	24	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	14	MV
8		g			
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	21	HV
		(Uwajima City)	10/8 - 10/9		
		3 3/	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	45	HV
		g (9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	16	MV
8	-	g (g,)			
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	24	HV
		Environmental Science (Udo City)	9/25 - 9/26		
		(cas eng)	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	3.6	MV
iviiyazaki i ici.	37	Environment (Miyazaki City)	11/3 - 11/12	3.0	141 4
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	12	HV
Kagosiiilla Fiel.	ر ر	and Public Health (Kagoshima City)	10/28 - 10/29	12	11 V
		and I done Heatin (Nagosinina City)			
Olaina Pun C	26	Constitute (Venices: Viller)	10/30 - 10/31	4.8	HV
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	4.8	HV
			9/25 - 9/26		
			9/26 - 9/27		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

[1-4-1] 3,3',4,4'-Tetrachlorobiphenyl (#77) /air (pg/m³)

Monitored year: 2019

Detection Frequency (site): 36/36 (Missing value: 0)
Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.02 Quantification limit: 0.04

	Aggregated value
Geometric mean	0.097
Median	0.090
Maximum	0.39
Minimum	tr(0.03)

Local communities	No.	Monitored sites	Warm s		Air sampler
Hokkaido	1	Variable Carried Calmark at the Decree (A and House City)	Sampling dates 10/11 - 10/18	Measured value	
ноккатао	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	0.04	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.05	HV
support city	_	Support Fire Fair (Support City)	10/8 - 10/9	0.03	11.
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	0.06	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	0.05	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	0.07	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	0.08	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.09	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.22	MV
•		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	0.04	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.28	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	0.22	MV
Tokonama City		(Yokohama City)	10/25 11/3	0.22	
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	0.08	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	0.14	HV
			10/16 - 10/17		
			10/17 - 10/18	(0.00)	
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	tr(0.03)	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/17 - 10/18 10/28 - 10/29	0.10	HV
i amanasmi Piei.	13	Environment (Kofu City)	10/29 - 10/30	0.10	п٧
		Environment (Rota City)	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	0.12	MV
g		(Nagano City)		****	
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	0.06	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.18	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	0.08	HV
iviie Prei.	19		10/1 - 10/2	0.08	пν
		(Yokkaichi City)	10/1 - 10/2		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3	0.20	HV
Osuku I ICI.	20	Annex (Osaka City)	10/6 - 10/7	0.20	11 4
	l	(10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	1
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.09	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.15	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	0.06	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.07	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.15	HV
			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	0.21	MV
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	0.20	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	0.17	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.09	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.10	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.39	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.09	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.15	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(0.03)	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.08	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	0.04	HV
			9/25 - 9/26		
			9/26 - 9/27		

⁽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) 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 : 2019 Detection Frequency (site) : 26/36 (Missing value : 0) Detection Frequency (sample): 26/36 (Missing value: 0)

Detection limit: 0.009 Quantification limit: 0.022

	Aggregated value
Geometric mean	nd
Median	tr(0.010)
Maximum	0.040
Minimum	nd

Local communities	No.	Monitored sites		season Measured value	Air sampler
TT-1414-	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	Sampling dates 10/11 - 10/18		MY
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asanikawa City)	10/11 - 10/18	tr(0.010)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
support eny	_	Support First and (Support City)	10/8 - 10/9	iiu	11.
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	tr(0.010)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	tr(0.010)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	tr(0.020)	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26 9/26 - 9/27	tr(0.020)	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	tr(0.020)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	tr(0.010)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16 10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	nd	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	tr(0.010)	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	tr(0.010)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	tr(0.010)	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	tr(0.010)	HV
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7 10/7 - 10/8	tr(0.010)	HV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	tr(0.010)	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.010)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.010)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.010)	HV
,			9/29 - 9/30	(* * *)	
			9/30 - 10/1	1	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	tr(0.010)	MV
i amagaciii i ici.	20	Environment (Yamaguchi City)	7/27 - 10/1	11(0.010)	1V1 V
		Environment (Tamagaem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	tr(0.010)	MV
	21	Hagi Health and Wellare Center (Hagi City)	9/24 - 10/1	ur(0.010)	IVI V
T 1 1' D C	20	T 1 1' D C (1D 11' II 14 D) (' 1 1	0/20 10/1	. (0.010)	1117
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	tr(0.010)	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.010)	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	tr(0.010)	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.040	HV
			9/25 - 9/26		
			9/26 - 9/27	1	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.010)	MV
· ·				, ,	
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(0.010)	HV
-		Environmental Science (Udo City)	9/25 - 9/26	1 ` '' L	
		'	9/26 - 9/27	j	
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(0.010)	MV
, uzum 1 101.	J-1	Environment (Miyazaki City)	11/0 11/12	1 (0.010)	141 4
		Zin i di d			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.010)	HV
Kagosiiiiia Piel.	33	and Public Health (Kagoshima City)	10/28 - 10/29	u(0.010)	пν
		and Fuone Health (Nagoshima City)			
01: 7.0	2.	G H 1 (K : : YE'II)	10/30 - 10/31		****
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		

⁽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) 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] Pentachlorobiphenyls/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.09 Quantification limit: 0.24

	Aggregated value
Geometric mean	7.0
Median	7.3
Maximum	39
Minimum	1.5

Local communities	No.	Monitored sites	Warm season		Air sampler
TT-1-1: 1-	1	Variable Consul Calmarka to al Decrea (A - 1 ilares Cita)	Sampling dates 10/11 - 10/18	Measured value	MX7
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	2.2	MV
	Sapporo Art Park (Sapporo City)	10/7 - 10/8	2.6	HV	
		10/8 - 10/9			
		10/9 - 10/10			
	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	4.9	HV	
		10/1 - 10/2			
	M D. C. (11 C) (CD 11; II 141 1E;	10/2 - 10/3	4.0	3.637	
Miyagi Pref. 4 Miyagi Prefectural Institute of Public Health and Environment (Sendai City)		10/4 - 10/11	4.8	MV	
Yamagata Pref. 5 Ya	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	4.7	MV	
-	City)				
n 1: p c	-		10/05 11/1	5.2) ar
	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	5.3	MV	
	City)				
Cit	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	6.5	MV	
	City)				
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	20	MV
	Protection (Koto Ward)				
	Chichijima Island (Ogasawara Village)	10/3 - 10/9	2.0	MV	
	Cincinjinia isianu (Ogasawara village)	10/3 - 10/9	2.0	IVI V	
		0.00			
Kanagawa Pref. 10 Kanagawa Enviro	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	20	HV	
		9/25 - 9/26			
,	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	17	MV	
	(Yokohama City)	10/29 - 11/3	17	IVI V	
Toyama Pref. 13 Tonami Air Quality Ishikawa Pref. 14 Ishikawa Prefectura	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	5.4	HV	
		10/8 - 10/9			
	Transi Air Oralita Manitarina Station (Transi Cita)	10/9 - 10/10 10/15 - 10/16	1.1	1137	
	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	11	HV	
		10/17 - 10/18			
	Ishikawa Prefectural Institute of Public Health and	10/17 - 10/18	2.0	HV	
	Environmental Science (Kanazawa City)	10/16 - 10/17	2.0	11 7	
		10/17 - 10/18			
	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	9.5	HV	
	Environment (Kofu City)	10/29 - 10/30			
			10/30 - 10/31		
Nagano Pref. 16 Nagano Environi (Nagano City)	Nagano Environmental Conservation Research Institute	10/24 - 10/31	7.9	MV	
	(Nagano City)				
	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	3.6	HV	
	Environmental Sciences (Kakamigahara City)	10/29 - 10/30	5.5	11 ,	
		10/30 - 10/31			
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	13	MV
M. D. C	10	Mr. D. C. e. H. Id. and a construction of the	0/20 10/1	7.3	****
	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/30 - 10/1 10/1 - 10/2	7.3	HV	
	(1 OKKAICIII City)	10/1 - 10/2			
	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	22	HV	
	20	Annex (Osaka City)	10/6 - 10/7		11.1
			10/7 - 10/8		

Local communities	No.	Monitored sites	Warm season		Air sampler
Local communities			Sampling dates	Measured value	All sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	9.4	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	14	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	5.8	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	2.2	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	16	HV
			9/29 - 9/30		
	L		9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	8.9	MV
		Environment (Yamaguchi City)			
	27	H :H 14 1W16 C (H :C:)	9/24 - 10/1	7.2	MV
	21	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	1.2	IVI V
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	15	HV
Tokusiiiiia Tici.	20	Environmental Sciences Center (Tokushima City)	10/1 - 10/2	13	11 v
		Environmental Sciences Center (Tokushinia City)	10/2 - 10/3	1	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	8.4	MV
Ragawa 1 Ici.	2)	Ragawa Freneeturai Fubile Swimming Foot (Fakamatsu City)	10/23 - 10/20	0.4	1 V1 V
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	11	HV
		(Uwajima City)	10/8 - 10/9	ĺ	
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	39	HV
		3	9/25 - 9/26	1	
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	7.3	MV
Ç					
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	13	HV
		Environmental Science (Udo City)	9/25 - 9/26]	
			9/26 - 9/27	1	
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	1.7	MV
-		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	5.9	HV
		and Public Health (Kagoshima City)	10/29 - 10/30	1	
			10/30 - 10/31]	
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	1.5	HV
			9/25 - 9/26		
			9/26 - 9/27]	

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

[1-5-1] 2,3,3',4,4'-Pentachlorobiphenyl (#105) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	0.19
Median	0.21
Maximum	1.0
Minimum	tr(0.03)

Local communities	No.	Monitored sites		season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	Sampling dates 10/11 - 10/18	0.08	MV
ноккатао	1	Kamikawa Generai Suoprefecturai Bureau (Asanikawa City)	10/11 - 10/18	0.08	IVI V
g G:	_	G ALD L (G G'L)	10/7 10/0	0.05	****
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.05	HV
			10/8 - 10/9		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	10/9 - 10/10 9/30 - 10/1	0.12	HV
iwate Frei.	3	Sugo Air Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	0.12	п٧
			10/1 - 10/2		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	0.13	MV
wiiyugi i ici.		(Sendai City)	10/4 10/11	0.13	141 4
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	0.12	MV
I umuguu I IVI		City)	<i>y</i> , 2 , 10,1	0.12	112 1
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	0.13	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.14	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.55	MV
•		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	0.08	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.58	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.44	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	0.15	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	0.35	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	0.04	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
** *** *		Y 110 0 11 0 10 10 10 10 10 10 10 10 10 1	10/17 - 10/18	6.21	**
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	0.21	HV
		Environment (Kofu City)	10/29 - 10/30		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/30 - 10/31 10/24 - 10/31	0.23	MV
Nagano Fici.	10	(Nagano City)	10/24 - 10/31	0.23	1V1 V
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	0.08	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.60	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	0.19	HV
iviic riei.	19	(Yokkaichi City)	10/1 - 10/2	0.19	п٧
		(1 OKKAICIII CIty)	10/1 - 10/2		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3	0.59	HV
Obuna 1 IVI.	20	Annex (Osaka City)	10/6 - 10/7	0.57	11 4
		(-54444 514)	10/7 - 10/8		
			10// - 10/0		

Local communities	No.	Monitored sites		Warm season	
			Sampling dates	Measured value	Air sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.25	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.32	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	0.14	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.08	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.41	HV
		,(rm -onana eng)	9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	0.42	MV
i amaguem i ici.	20	Environment (Yamaguchi City))/47 = 10/1	0.72	1V1 V
		Environment (Tamaguem City)			
	27	Hari Harida and Walfana Cantan (Hari Cita)	9/24 - 10/1	0.43	MV
	21	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	0.43	IVI V
T 1 1: D C	20	T 1 1' D C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0/20 10/1	0.46	****
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	0.46	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.22	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.26	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	1.0	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.20	MV
Č					
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.41	HV
		Environmental Science (Udo City)	9/25 - 9/26	****	
		(cac chy)	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	0.04	MV
1111 yuzuki i ici.]]]	Environment (Miyazaki City)	11/2 11/12	0.07	1V1 V
		Divironment (miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/29 10/20	0.16	HV
Nagosnima Pref.	33		10/28 - 10/29	0.16	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
	L		10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	tr(0.03)	HV
			9/25 - 9/26		
			9/26 - 9/27		

⁽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) 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 : 2019 Detection Frequency (site) : 24/36 (Missing value : 0) Detection Frequency (sample): 24/36 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.02)
Median	tr(0.02)
Maximum	0.10
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
Заррого Спу		Sapporo Art I ark (Sapporo City)	10/7 - 10/8	nu	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
Twate Tiel.		Sugo in Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	na	11 4
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	nd	MV
, 8		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
Ü		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	tr(0.02)	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	tr(0.02)	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.06	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.06	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	tr(0.04)	MV
		(1 okonama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
T. D. C	12		10/9 - 10/10	. (0.04)	****
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	tr(0.04)	HV
			10/16 - 10/17		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/17 - 10/18 10/15 - 10/16	nd	HV
Ishikawa Prei.	14	Environmental Science (Kanazawa City)	10/13 - 10/16	na	п٧
		Environmental Science (Kanazawa City)	10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	tr(0.02)	HV
i amanasm i ici.	13	Environment (Kofu City)	10/29 - 10/30	u(0.02)	11.4
		(, /	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	tr(0.02)	MV
Č		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	nd	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	10/30 - 10/31 9/24 - 10/1	0.05	MV
ingoja Onj	10	Camada Adama Lana (Lagoya Chy)	212 I 10/I	0.03	171 7
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	tr(0.02)	HV
		(Yokkaichi City)	10/1 - 10/2		
	L		10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	0.06	HV
		Annex (Osaka City)	10/6 - 10/7		
	l		10/7 - 10/8		

Local communities	s No. Monitored sites		Warm season		Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	tr(0.02)	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.03)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.02)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.04)	HV
,			9/29 - 9/30	-(0.0.)	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	tr(0.03)	MV
i amaguem i iei.	20	Environment (Yamaguchi City))/2 4 - 10/1	11(0.03)	IVI V
		Environment (Tamaguem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	tr(0.03)	MV
	21	Hagi Health and Wellare Center (Hagi City)	9/24 - 10/1	ur(0.03)	IVI V
T 1 1' D C	20	T 1 1' D C (1D 11' II 14 D) (' 1 1	0/20 10/1	. (0.04)	1117
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	tr(0.04)	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3	(0.00)	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.02)	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	tr(0.02)	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.10	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.02)	MV
-					
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(0.04)	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
•		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.02)	HV
		and Public Health (Kagoshima City)	10/29 - 10/30	11(0.02)	11 4
		The result (reagonime Oity)	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
OKIIIAWA FIEL.	30	Cape 11000 (Kuniganii vinage)	9/24 - 9/23	nu	11 V
			9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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.

[1-5-3] 2,3',4,4',5-Pentachlorobiphenyl (#118) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	0.51
Median	0.56
Maximum	2.9
Minimum	0.07

Air sampler MV HV HV MV MV
HV HV MV
HV MV MV
HV MV MV
MV MV
MV MV
MV
MV
MV
MV
MV
MV
MV
MV
HV
MV
171 7
HV
HV
1137
HV
HV
11 V
MV
HV
MV
MV
HV

Local communities	s No. Monitored sites		Warm	season	Air sampler
Local communities	INO.	Monitored sites	Sampling dates	Measured value	Air sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.72	HV
			10/16 - 10/17		
			10/17 - 10/18	1	
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.90	HV
Rooc City	22	Robe Histitute of Health (Robe City)	10/8 - 10/9	0.50	11 V
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1	
N. D. C	22	The state of the Market Court (The state)	10/9 - 10/10	0.42	****
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	0.42	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.19	HV
			10/29 - 10/30		
			10/30 - 10/31	]	
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	1.2	HV
,		, , , , , , , , , , , , , , , , , , ,	9/29 - 9/30	1	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	0.79	MV
i amaguchi Prei.	20		9/24 - 10/1	0.79	IVI V
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	0.77	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	1.3	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
		, , , , , , , , , , , , , , , , , , , ,	10/2 - 10/3	1	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.62	MV
Ragawa 1 Ici.	2)	Ragawa i refecturar i done Swimming i oor (Takamatsu City)	10/23 - 10/20	0.02	IVI V
Ehime Pref.	20	Elimo Boof stool Community Name Basical Office	10/7 10/9	0.75	1137
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.75	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	2.9	HV
			9/25 - 9/26		
			9/26 - 9/27	1	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.52	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	1.1	HV
Kumamoto Pref.	33		9/24 - 9/25	1.1	пν
		Environmental Science (Udo City)	*******************************		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	0.11	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.42	HV
-		and Public Health (Kagoshima City)	10/29 - 10/30	1	
		]	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	0.07	HV
OKIIIAWA FIEL.	30	Cape fredo (Kunigaini vinage)	9/24 - 9/23	0.07	11 V
			9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

## [1-5-4] 2',3,4,4',5-Pentachlorobiphenyl (#123) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 16/36 (Missing value : 0) Detection Frequency (sample): 16/36 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.06
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
ноккатао	1	Kamikawa Generai Suoprefecturai Bureau (Asanikawa City)	10/11 - 10/18	na	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
заррого Спу		Sapporo Art I ark (Sapporo City)	10/8 - 10/9	IIG	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
111000 11011		sugerin Quanty memoring sunten (runnam eny)	10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
r umagata 1101.		City)	3/21 10/1	na –	141 4
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	nd	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	tr(0.03)	MV
•		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	tr(0.04)	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	tr(0.03)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
rviigata i ici.	12	Gyania An Quanty Monitoring Station (Migata City)	10/8 - 10/9	IId	11 V
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	tr(0.03)	HV
Ž			10/16 - 10/17	, ,	
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	tr(0.02)	HV
		Environment (Kofu City)	10/29 - 10/30		
Nagana D£	17	Nagano Environmental Conservation Research Institute	10/30 - 10/31	L. J.	3.43.7
Nagano Pref.	16	(Nagano City)	10/24 - 10/31	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	nd	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	tr(0.03)	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	tr(0.02)	HV
		(Yokkaichi City)	10/1 - 10/2	-(	
		`	10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	tr(0.03)	HV
		Annex (Osaka City)	10/6 - 10/7		
			10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.02)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	nd	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.03)	HV
•			9/29 - 9/30	` ′	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	tr(0.02)	MV
r umagacini r rei.	20	Environment (Yamaguchi City)	9/21 10/1	4(0.02)	111 1
		Environment (Tamagaem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	tr(0.02)	MV
	21	Tragi freatti and wellare center (fragi city)	9/24 - 10/1	11(0.02)	IVI V
Tokushima Pref.	28	Tolyyohima Duefoetymal Dyklie Health, Dhamma coytical and	9/30 - 10/1	tw(0.02)	HV
Tokusnima Prei.	28	Tokushima Prefectural Public Health, Pharmaceutical and	*****	tr(0.03)	ΗV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
77	20	The state of the s	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	nd	MV
FII: P 0	20	Ti: D 0 . 10	10/5 10/0		****
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.06	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.02)	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(0.03)	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
,		Environment (Miyazaki City)			
		())			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	nd	HV
134505iiiiia i ici.	33	and Public Health (Kagoshima City)	10/29 - 10/29	110	11 V
		and I done Health (Nagosiiilia City)	10/29 - 10/30		
Okinawa Pref.	26	Constitute (Venicous Villean)	9/24 - 9/25	nd	HV
Okinawa Prei.	36	Cape Hedo (Kunigami Village)		nd	HV
			9/25 - 9/26		
			9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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.

## [1-5-5] 3,3',4,4',5-Pentachlorobiphenyl (#126) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 27/36 (Missing value : 0) Detection Frequency (sample): 27/36 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.01)
Median	tr(0.01)
Maximum	0.06
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	tr(0.01)	MV
	_				
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
Заррого Спу		Sapporo Art I ark (Sapporo City)	10/8 - 10/9	nu	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	tr(0.01)	HV
			10/1 - 10/2	(****)	
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	nd	MV
		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	tr(0.01)	MV
		City)		, ,	
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	tr(0.01)	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	tr(0.01)	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.03	MV
-		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	tr(0.02)	HV
C			9/25 - 9/26	` ′	
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	tr(0.02)	MV
		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	tr(0.01)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	tr(0.02)	HV
			10/16 - 10/17		
Ishikawa Pref.	1.4	TITLE D.C. (T. C. CD.1) II 14 1	10/17 - 10/18	1	1137
Ishikawa Prei.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17 10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	tr(0.01)	HV
i amanasmi i ici.	13	Environment (Kofu City)	10/29 - 10/30	u(0.01)	11 V
		Zin monimum (12012 etty)	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	tr(0.02)	MV
		(Nagano City)		, ,	
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	tr(0.01)	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30	` ′	
		`	10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	tr(0.01)	MV
Mi- DC	10	Mis Diofestina Health and Francisco P. L. L. C.	0/20 10/1	tu(0.01)	T13.7
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1 10/1 - 10/2	tr(0.01)	HV
		(Yokkaichi City)	10/1 - 10/2		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3	tr(0.01)	HV
Osaka I ICI.	20	Annex (Osaka City)	10/6 - 10/7	11(0.01)	11 V
	1	Times (Suita City)	10/7 - 10/8		

Local communities	No. Monitored sites			season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.01)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.01)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.02)	HV
•			9/29 - 9/30	` ′	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	tr(0.01)	MV
r amagaem r rei.	20	Environment (Yamaguchi City)	9/21 10/1	4(0.01)	111 1
		Environment (Tuningueni City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	tr(0.01)	MV
	21	Tragi Treatti and Wellare Center (Tragi City)	)/2 <del>4</del> - 10/1	11(0.01)	IVI V
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	tr(0.01)	HV
Tokushima Prei.	20	· ·	10/1 - 10/2	u(0.01)	п٧
		Environmental Sciences Center (Tokushima City)			
. D. C	20	W. D.C. IDIII G.: D.I/TI	10/2 - 10/3	. (0.01)	207
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.01)	MV
	20	TI: D 0 . 10	10/5 10/0		****
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.06	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.02)	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(0.02)	HV
		Environmental Science (Udo City)	9/25 - 9/26		
		, , , , , , , , , , , , , , , , , , , ,	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
•		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.01)	HV
12mg0011111111 1 101.		and Public Health (Kagoshima City)	10/29 - 10/30	4(0.01)	11 1
		and I done Heatti (ixagosiiina Oity)	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
Okinawa Piel.	30	Cape riedo (Kuniganii vinage)		na	п۷
			9/25 - 9/26		
			9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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] Hexachlorobiphenyls/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	2.9
Median	2.8
Maximum	79
Minimum	0.63

Local communities	No.	Monitored sites		Magazina di vialina	Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	0.93	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.93	HV
заррого Спу		Sapporo Art I ark (Sapporo City)	10/8 - 10/9	0.93	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	1.6	HV
Twate Tiel.		Sugo III Quanty Momening Suction (Tukizuwa City)	10/1 - 10/2	1.0	11.
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	1.8	MV
, 0		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	2.4	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	1.8	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	2.2	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	7.1	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	0.78	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	7.3	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	5.6	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	2.1	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	7.7	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	0.73	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
Vamanashi Dusc	1.5	Yamanashi Prefectural Institute of Public Health and	10/17 - 10/18	2.0	1117
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30	2.9	HV
		Environment (Rota City)	10/29 - 10/30		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	2.6	MV
1,454110 1 101.	10	(Nagano City)	10/24 10/31	2.0	171 Y
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	1.4	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	6.6	MV
Mia Durf	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	2.0	HV
Mie Pref.	19	(Yokkaichi City)	10/1 - 10/2	2.8	нv
		(1 OKKAICHI CILY)	10/1 - 10/2		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3	7.1	HV
Osaka 1 ICI.	20	Annex (Osaka City)	10/6 - 10/7	/.1	11 V
	l	I IIII ( Count City)	10/7 - 10/8		

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

Detection frequency (sample) is based on the number of samples, 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.

## [1-6-1] 2,3,3',4,4',5-Hexachlorobiphenyl (#156) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 29/36 (Missing value : 0) Detection Frequency (sample): 29/36 (Missing value: 0)

	Aggregated value
Geometric mean	0.04
Median	0.04
Maximum	0.51
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
TT-1414-	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	Sampling dates 10/11 - 10/18	Measured value	MXZ
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asanikawa City)	10/11 - 10/18	tr(0.03)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
Support City	_	Support First and (Support City)	10/8 - 10/9	iiu	11.
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	tr(0.02)	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	tr(0.02)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	tr(0.03)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	tr(0.03)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	tr(0.03)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	0.09	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26 9/26 - 9/27	0.08	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.07	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	tr(0.02)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16 10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	0.08	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	tr(0.03)	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	0.04	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.13	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	tr(0.03)	HV
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7 10/7 - 10/8	0.07	HV

Local communities	No. Monitored sites		Warm	season	Air sampler
	INO.	Monitored sites	Sampling dates	Measured value	Air sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.04	HV
			10/16 - 10/17		
			10/17 - 10/18	1	
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.05	HV
Robe City	22	Robe Histitute of Health (Robe City)	10/8 - 10/9	0.03	11 V
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1	
N. D. C	22	The state of the Market Court (The state)	10/9 - 10/10	. (0.02)	****
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.03)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
			10/29 - 10/30		
			10/30 - 10/31]	
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.06	HV
,		, , , , , , , , , , , , , , , , , , ,	9/29 - 9/30		
			9/30 - 10/1	1	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/30 - 10/1	0.04	MV
i amaguchi Pref.	∠0		9/24 - 10/1	0.04	IVI V
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	0.05	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	0.07	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
		, , , , , , , , , , , , , , , , , , , ,	10/2 - 10/3	1	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.04	MV
Ragawa 1 Ici.	2)	Ragawa i refecturar i done Swimming i oor (Takamatsu City)	10/23 - 10/20	0.04	IVI V
Ehime Pref.	20	Eli Dicital Citation and Communication and Commu	10/7 10/0	0.05	1117
Enime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.05	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.51	HV
			9/25 - 9/26		
			9/26 - 9/27]	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.04	MV
- 1.6 1 - 1.					
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.10	HV
Kumamoto Pref.	33		9/24 - 9/25	0.10	пν
		Environmental Science (Udo City)	*******************************		
	L .		9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.03)	HV
-		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31	1	
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
Okillawa 1 ICI.	30	Cape Hedo (Kaniganii vinage)	9/25 - 9/26	iiu	11 V
	I		9/26 - 9/27		

⁽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) 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 : 2019 Detection Frequency (site) : 29/36 (Missing value : 0) Detection Frequency (sample): 29/36 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.01)
Median	tr(0.01)
Maximum	0.35
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	tr(0.01)	MV
поккащо	1	Kamikawa Generai Suoprejecturai Bureau (Asamkawa City)	10/11 - 10/18	tr(0.01)	IVI V
G. G.		G 4 . P. 1 (G G';)	10/7 10/0		****
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
	_		10/9 - 10/10	(0.04)	
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	tr(0.01)	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	tr(0.01)	MV
C		City)		, ,	
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	tr(0.01)	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	tr(0.01)	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.03	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.03	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	tr(0.02)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	tr(0.01)	HV
Tingula Tion	1.2	Gyana in Quanty Montoring Station (Migate City)	10/8 - 10/9	u(0.01)	11 1
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	tr(0.02)	HV
royama rici.	13	Tollatin 7th Quanty Wolltoning Station (Tollatin City)	10/16 - 10/17	u(0.02)	11.4
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
Ishinawa 1101.		Environmental Science (Kanazawa City)	10/16 - 10/17	iid.	11 7
		Zinvinoimmi zoromoo (riamazawa eng)	10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	tr(0.01)	HV
ramanasın rici.	13	Environment (Kofu City)	10/29 - 10/30	4(0.01)	11 4
		Environment (Rota City)	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	tr(0.01)	MV
ragano rren	10	(Nagano City)	10/21 10/31	1(0.01)	1,1,1
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	tr(0.01)	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.03	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	tr(0.01)	HV
1,110 1 101.	17	(Yokkaichi City)	10/1 - 10/2	4(0.01)	11 4
		(10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	tr(0.02)	HV
		Annex (Osaka City)	10/6 - 10/7	(0.02)	-1.
	1		10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
Local communities	110.	Worthored sites	Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	tr(0.01)	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.01)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.01)	HV
			11/6 - 11/7	, í	
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.02)	HV
,			9/29 - 9/30	-(0.0-)	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	tr(0.01)	MV
ramagaciii r rei.	20	Environment (Yamaguchi City)	3/24 TO/T	4(0.01)	141 4
		Environment (Tumagaem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	tr(0.01)	MV
	21	Tragi freatth and wenare center (fragi enty)	9/24 - 10/1	11(0.01)	1 V1 V
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	tr(0.02)	HV
TOKUSIIIIIa TTCI.	20	1	10/1 - 10/2	11(0.02)	11 V
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
V D f	29	V		t-(0.01)	MV
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.01)	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.03	HV
Emme 1 ici.	30	(Uwajima City)	10/8 - 10/9	0.03	11 4
		(Owajina City)	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.35	HV
i ukuoka i ici.	31	Omata City Government Bunding (Omata City)	9/25 - 9/26	0.55	11 V
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.01)	MV
Saga Fici.	32	Saga Freiectural Environmental Research Center (Saga City)	9/24 - 10/1	u(0.01)	IVI V
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.03	HV
Kumamoto Pref.	33		9/24 - 9/25	0.03	пν
		Environmental Science (Udo City)	********************************		
Missagalsi Ducf	34	Miyazaki Prefectural Institute for Public Healthand	9/26 - 9/27 11/5 - 11/12		MV
Miyazaki Pref.	34	, ,	11/3 - 11/12	nd	IVI V
		Environment (Miyazaki City)			
Vaccahirea Desf	25	Vacashima Profactural Institute for Environmental D	10/29 10/20	t=(0,01)	LIVI
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.01)	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
011 - 0	2.5	0 ** 1 0* 1 *****	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

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

[1-6-3] 2,3',4,4',5,5'-Hexachlorobiphenyl (#167) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 32/36 (Missing value : 0) Detection Frequency (sample): 32/36 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.02)
Median	tr(0.02)
Maximum	0.22
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	tr(0.01)	MV
				, ,	
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
виррого спу	_	Supporo Art Lark (Supporo City)	10/8 - 10/9	nu	11 v
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	tr(0.01)	HV
			10/1 - 10/2	()	
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	tr(0.01)	MV
		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	tr(0.01)	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	tr(0.01)	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	tr(0.01)	MV
		City)		. ,	
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.04	MV
•		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
		emenjina island (ogasuwata vinago)	10/5 10/7	nu	111 1
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.04	HV
C			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	0.03	MV
		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	tr(0.01)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	0.03	HV
			10/16 - 10/17		
*1.1 5.0		717 P. 0 . 17	10/17 - 10/18		****
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/17 - 10/18 10/28 - 10/29	tr(0.02)	HV
i amanasın Fici.	13	Environment (Kofu City)	10/29 - 10/29	u(0.02)	11 V
		Environment (Note Ony)	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	tr(0.02)	MV
g 191		(Nagano City)		(***-/	•
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	tr(0.01)	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
		, , , , , , , , , , , , , , , , , , , ,	10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.05	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	tr(0.01)	HV
IVIIC I ICI.	17	(Yokkaichi City)	10/1 - 10/2	4(0.01)	11 V
		(1 Samuelli City)	10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	0.04	HV
		Annex (Osaka City)	10/6 - 10/7	****	/
	1	· ''	10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	tr(0.02)	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.02)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.01)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(0.01)	HV
		,	10/29 - 10/30	` ′	
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.03	HV
		a 21.9 22.2	9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	tr(0.02)	MV
i amaguem i ici.	20	Environment (Yamaguchi City))/2 7 - 10/1	u(0.02)	1V1 V
		Divironment (Tamaguem City)			
	27	Hari Harida and Walfana Cantan (Hari Cita)	9/24 - 10/1	t-(0,02)	MV
	21	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	tr(0.02)	IVI V
T 1 1' D C	20	T 1 1' D C (1D 11' II 1/1 D1 (' 1 1	0/20 10/1	0.04	1137
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	0.04	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.02)	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	tr(0.02)	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.22	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.02)	MV
· ·				, ,	
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.04	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(0.01)	MV
] -	Environment (Miyazaki City)	11/0 11/12	4(0.01)	141 4
		Divisormont (1911) azaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.02)	HV
Kagosiiiiia Piel.	دد ا			u(0.02)	пν
		and Public Health (Kagoshima City)	10/29 - 10/30		
01: 7.0	2.	G H 1 (V : 'V''II)	10/30 - 10/31		****
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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.

[1-6-4] 3,3',4,4',5,5'-Hexachlorobiphenyl (#169) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 3/36 (Missing value : 0) Detection Frequency (sample): 3/36 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	tr(0.02)
Minimum	nd

Local communities	No.	Monitored sites		season Measured value	Air sampler
TT-14: 4-	1	Variable Consul Salar fortunal Decree (April Bosses City)	Sampling dates		M37
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
Баррого Спу		Sapporo Art I ark (Sapporo City)	10/8 - 10/9	nu	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
1		sugerin Quanty Memoring Sunten (Tunizuma eng)	10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	nd	MV
, 6		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
•		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	nd	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	nd	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	tr(0.01)	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	nd	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	nd	HV
		Environment (Kofu City)	10/29 - 10/30		
N D C	1.0	N P 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10/30 - 10/31	. (0.01)	207
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	tr(0.01)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	nd	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	nd	MV
) (C. D. C.	10	Mr. D. G W. H I.B	0/20 10/1	,	
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	nd	HV
		(Yokkaichi City)	10/1 - 10/2		
O1 P. C	20	Oralis Island Bushartonal Commun. (D. 117. D. 117. C.	10/2 - 10/3		T T T 7
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7	nd	HV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	nd	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	nd	HV
·			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
g 1 101.		Environment (Yamaguchi City)	2,2, 10,1		
		Zivinoimion (Tuninguoni eng)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
	21	Tragi Treatti and Welfare Center (Tragi City))/2 4 - 10/1	na	IVI V
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	nd	HV
Tokushima Prei.	20	· ·	10/1 - 10/2	na	пν
		Environmental Sciences Center (Tokushima City)			
17 D.C	20	W. D.C. IDIII G.: D.I/TI	10/2 - 10/3	,	107
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	nd	MV
	20	TI: D 0 . 10	10/5 10/0		****
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	tr(0.02)	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	nd	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	nd	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
.		Environment (Miyazaki City)			
		` ' ''			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	nd	HV
	"	and Public Health (Kagoshima City)	10/29 - 10/30		
		City)	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
OKIIIAWA FICI.	30	Cape 11000 (Kuniganii vinage)	9/24 - 9/23	nu	11 V
			9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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] Heptachlorobiphenyls/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	0.66
Median	0.61
Maximum	47
Minimum	0.17

Local communities	No.	Monitored sites		Magazara di valua	Air sampler
** 11 '1		W 7 C 101 C 1D (117 C)	Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	0.23	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.24	HV
Баррого Спу	_	Sapporo Art I ark (Sapporo City)	10/8 - 10/9	0.24	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	0.34	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	0.36	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	0.81	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	0.35	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	0.40	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	1.2	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	0.20	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26 9/26 - 9/27	1.4	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	1.0	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	0.51	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/9 - 10/10 10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	3.7	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	0.18	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	0.37	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	0.41	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	0.39	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	1.6	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	0.55	HV
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7 10/7 - 10/8	1.1	HV

Local communities	No.	Monitored sites	Warm	season	Air sampler
Local communities	190.	iviointored sites	Sampling dates	Measured value	Air sampier
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.68	HV
, ,			10/16 - 10/17		
			10/17 - 10/18	1	
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.99	HV
Rooc City	22	Robe Histitute of Health (Robe City)	10/8 - 10/9	0.55	11 v
				1	
N. D. C	22	The state of the Market Court (The state)	10/9 - 10/10	0.46	****
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	0.46	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.24	HV
			10/29 - 10/30		
			10/30 - 10/31	Ì	
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.96	HV
		City)	9/29 - 9/30	""	21,
			9/30 - 10/1	1	
V	26	Yamaguchi Prefectural Institute of Public Health and	9/30 - 10/1	0.76	MV
Yamaguchi Pref.	26		9/24 - 10/1	0.76	MV
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	0.63	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	1.4	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
		Environmental sciences center (Tokushinia City)	10/2 - 10/3	1	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.75	MV
Kagawa Prei.	29	Ragawa Prefecturai Public Swimming Pool (Takamatsu City)	10/23 - 10/28	0.73	IVI V
			10.5		
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	2.5	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	47	HV
		- ' - '	9/25 - 9/26]	
			9/26 - 9/27	1	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.58	MV
Saga 1 ICI.	32	Saga i refecturar Environmentar Research Center (Saga City))/24 - 10/1	0.56	IVI V
T/ . D . C	22	TV	0/24 0/25	0.00	777.7
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.98	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	0.17	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.97	HV
12mg001111110 1 101.	55	and Public Health (Kagoshima City)	10/29 - 10/30	0.77	11 1
		and Latite Health (Ragosinina City)			
01: 7.0	2.		10/30 - 10/31	0.10	****
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	0.18	HV
			9/25 - 9/26]	
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

[1-7-1] 2,2',3,3',4,4',5-Heptachlorobiphenyl (#170) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	0.055
Median	0.060
Maximum	2.8
Minimum	tr(0.01)

Local communities	No.	Monitored sites		season	Air sampler
** 11 '1		W 7 C 101 C 1D (117 C)	Sampling dates	Measured value	-
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	0.04	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	tr(0.02)	HV
11 7			10/8 - 10/9		
It- Du-f	2	Constant Openitor Manifestine Continue (Talianas Cita)	10/9 - 10/10	t-(0,02)	1137
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1 10/1 - 10/2	tr(0.03)	HV
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	tr(0.03)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	0.07	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	0.04	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	0.04	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.11	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	tr(0.02)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.11	HV
			9/25 - 9/26 9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	0.09	MV
i okonama eny	11	(Yokohama City)	10/27 11/3	0.09	141 4
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	0.04	HV
			10/8 - 10/9		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/9 - 10/10 10/15 - 10/16	0.08	HV
Toyama Fier.	13	Tonann An Quanty Monitoring Station (Tonann City)	10/16 - 10/17	0.08	11 V
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	tr(0.01)	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	tr(0.03)	HV
		Environment (Kofu City)	10/29 - 10/30		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/30 - 10/31 10/24 - 10/31	0.04	MV
1.050110 1101.		(Nagano City)	10/21	3.01	171 7
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	tr(0.03)	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30 10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.16	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	0.04	HV
		(Yokkaichi City)	10/1 - 10/2		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3 10/5 - 10/6	0.09	HV
Obuku 1 101.	20	Annex (Osaka City)	10/6 - 10/7	0.07	11 4
		` ''	10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
	110.		Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.06	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.07	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	0.04	HV
		3 (),	11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(0.02)	HV
Similare 11ci.		OKI I Validiai Tela Italii Observatory (Okinosiinia 1041)	10/29 - 10/30	11(0.02)	11.
			10/30 - 10/31	1	
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.08	HV
Tillosiiilia City	23	Timosinina City Kokutaiji Junioi Tiigii School (Tinosinina City)	9/29 - 9/30	0.08	ΠV

1: D. C	26	Tr. 1'D C . 17 CD 11' Tr 11 1	9/30 - 10/1	0.07	107
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	0.07	MV
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	0.07	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	0.12	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.07	MV
· ·					
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.29	HV
		(Uwajima City)	10/8 - 10/9		
		(10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	2.8	HV
i ukuoku i ici.	31	Omata City Government Building (Omata City)	9/25 - 9/26	2.0	11 4
			9/26 - 9/27		
Casa Duaf	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.05	MV
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.05	IVI V
и . в с	22	Tr D. C 11	0/04 0/05	0.10	****
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.10	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(0.01)	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.07	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	tr(0.01)	HV
		1 \ 5 \ 6/		(' ' /	
			9/25 - 9/26		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

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

[1-7-2] 2,2',3,4,4',5,5'-Heptachlorobiphenyl (#180) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	0.10
Median	0.11
Maximum	8.4
Minimum	tr(0.02)

Local communities	No.	Monitored sites	Warm Sampling dates	Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	0.04	MV
	_				
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.05	HV
Заррого Спу		Sapporo Art I ark (Sapporo City)	10/8 - 10/9	0.03	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	0.06	HV
Twate Tier.		Sugo III Quanty Momenting Station (Tukizawa City)	10/1 - 10/2	0.00	11,
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	0.06	MV
		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	0.15	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	0.04	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.05	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.18	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	0.04	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.22	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.16	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	0.10	HV
			10/8 - 10/9 10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/9 - 10/10	0.12	HV
Toyama Fier.	13	Tolianii Ali Quanty Monitoring Station (Tolianii City)	10/16 - 10/17	0.12	11 V
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	tr(0.02)	HV
Ishikawa 1 Tel.		Environmental Science (Kanazawa City)	10/16 - 10/17	11(0.02)	11.
		, , , , , , , , , , , , , , , , , , , ,	10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	0.05	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	0.06	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	0.06	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30 10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.31	MV
) (10	Mr. D. G W. Id 17	0/20 107	0.00	
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	0.08	HV
		(Yokkaichi City)	10/1 - 10/2		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3 10/5 - 10/6	0.18	HV
Osaka Piel.	20	Annex (Osaka City)	10/6 - 10/6	0.10	пν

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.12	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.16	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	0.07	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(0.02)	HV
		,	10/29 - 10/30	(* *)	
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.15	HV
		City)	9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	0.15	MV
i amaguem riel.	20	Environment (Yamaguchi City)	9/24 - 10/1	0.13	IVI V
		Environment (1 amaguem City)			
	27	Hari Harida and Walfana Cantan (Hari Cita)	9/24 - 10/1	0.13	MV
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	0.13	MV
T 1 1: D C	20	T 1 1' D C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0/20 10/1	0.25	****
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	0.25	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.12	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.62	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	8.4	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.08	MV
C					
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.18	HV
		Environmental Science (Udo City)	9/25 - 9/26		
		[9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(0.02)	MV
,	-	Environment (Miyazaki City)	11.0 11/12	(0.02)	-111 1
		Ziii ii iii juzulii City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.17	HV
Kagosiiiiia Piel.	دد ا		10/28 - 10/29	0.1/	п٧
		and Public Health (Kagoshima City)			
01: 7.0	2.	G H 1 (V : 'V''II)	10/30 - 10/31	. (0.02)	****
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	tr(0.02)	HV
			9/25 - 9/26		
	1		9/26 - 9/27		

⁽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) 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 : 2019 Detection Frequency (site) : 16/36 (Missing value : 0) Detection Frequency (sample): 16/36 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.05
Minimum	nd

Local communities	No.	Monitored sites		season Measured value	Air sampler
TT-1-1: 1-	1	Variable Committee Committ	Sampling dates		MX
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	tr(0.01)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
		(10/8 - 10/9		
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
			10/1 - 10/2		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/2 - 10/3 10/4 - 10/11	nd	MV
wiiyagi i ici.	7	(Sendai City)	10/4 - 10/11	na	IVI V
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	tr(0.01)	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	tr(0.01)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	tr(0.01)	MV
Cinua riei.	7	City)	10/29 - 11/3	u(0.01)	IVI V
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	tr(0.01)	MV
,		Protection (Koto Ward)		(- /-)	
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	tr(0.01)	HV
Kanagawa 1 ICI.	10	Rahagawa Environmentai Research Center (Tinatsuka City)	9/25 - 9/26	u(0.01)	11 V
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	tr(0.01)	MV
	10		10/5 10/0		
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8 10/8 - 10/9	nd	HV
			10/8 - 10/9		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	tr(0.01)	HV
,			10/16 - 10/17	(, ,	
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
Vomenashi Duaf	15	Yamanashi Prefectural Institute of Public Health and	10/17 - 10/18	4	HV
Yamanashi Pref.	15	Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30	nd	ΗV
		Environment (Kota City)	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	tr(0.01)	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	nd	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30 10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	tr(0.01)	MV
76. 7. 2	4.0		0/00 1011		
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	nd	HV
		(Yokkaichi City)	10/1 - 10/2 10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3	nd	HV
Obulu 1 101.		Annex (Osaka City)	10/6 - 10/7	114	11.4
			10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	nd	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.01)	HV
,			9/29 - 9/30	(* *)	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
i amagacini i ici.	20	Environment (Yamaguchi City)	7/27 - 10/1	iid	1V1 V
		Environment (Tuningueni City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
	21	Tragi freattif and weffare Center (fragi City)	9/24 - 10/1	IIG	IVI V
Tokushima Pref.	28	T-11: Df41 D-1:-1:-1114. D14:14	9/30 - 10/1	t-(0.01)	HV
Tokusnima Prei.	28	Tokushima Prefectural Public Health, Pharmaceutical and	*****	tr(0.01)	нv
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	nd	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	tr(0.01)	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.05	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.01)	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(0.01)	HV
		Environmental Science (Udo City)	9/25 - 9/26	\	
		, "	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
,		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	nd	HV
ixagosiiiiia i ici.	33	and Public Health (Kagoshima City)	10/29 - 10/29	110	11 V
		and I done Health (Nagosiiilia City)	10/29 - 10/30		
Okinawa Pref.	26	Constitute (Veniconi Viller)	9/24 - 9/25	nd	HV
Okinawa Prei.	36	Cape Hedo (Kunigami Village)		nd	HV
			9/25 - 9/26		
	l		9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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.

[1-8] Octachlorobiphenyls/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 22/36 (Missing value : 0) Detection Frequency (sample): 22/36 (Missing value: 0)

	Aggregated value
Geometric mean	tr(0.08)
Median	tr(0.08)
Maximum	5.6
Minimum	nd

Local communities	No.	Monitored sites		season Measured value	Air sampler
TT 11 '1	1	V 7 C 101 C 1D (A 17 C)	Sampling dates		207
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
support eny	_	Support First and (Support City)	10/8 - 10/9	na	11 7
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	tr(0.11)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	nd	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	tr(0.07)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	tr(0.16)	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26 9/26 - 9/27	0.18	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	tr(0.13)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	tr(0.07)	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16 10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	tr(0.17)	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	10/17 - 10/16 10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.23	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	tr(0.08)	HV
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7 10/7 - 10/8	tr(0.12)	HV

Local communities	No.	Monitored sites	Warm	season	Air sampler
	INO.	Monitored sites	Sampling dates	Measured value	Air sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	tr(0.09)	HV
			10/16 - 10/17	` ′	
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.10)	HV
Robe City	22	Robe Histitute of Health (Robe City)	10/8 - 10/9	11(0.10)	11 V
N. D. C	22	The state of the Market Court (The state)	10/9 - 10/10	,	****
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	nd	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.12)	HV
•			9/29 - 9/30	` ′	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	tr(0.09)	MV
i amaguem Pref.	∠0		7/4 - 10/1	u(0.09)	1 V1 V
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	tr(0.08)	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	tr(0.15)	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2	, í	
		, , , , , , , , , , , , , , , , , , , ,	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.09)	MV
Ruguwa 1 Ici.	2)	Ragawa Percetara Paone Swimming Poor (Pakamatsa City)	10/23 10/20	u(0.05)	141 4
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.52	HV
Enime Prei.	30			0.32	нv
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	5.6	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.08)	MV
C				, ,	
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(0.12)	HV
Kumamoto 1 ici.	33		9/25 - 9/26	u(0.12)	11 V
		Environmental Science (Udo City)			
11.5 0			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.13)	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
Okinawa I ICI.	50	Cape Head (Rumgum v muge)	9/25 - 9/26	114	11 V
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

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

[1-9] Nonachlorobiphenyls/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 12/36 (Missing value : 0) Detection Frequency (sample): 12/36 (Missing value: 0)

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.20
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	tr(0.03)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	tr(0.03)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	tr(0.03)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	tr(0.04)	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26 9/26 - 9/27	tr(0.04)	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	tr(0.03)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	tr(0.03)	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	nd	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	nd	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	nd	HV
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7 10/7 - 10/8	nd	HV

Local communities	No.	Monitored sites	Warm season		Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	nd	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.03)	HV
•			9/29 - 9/30	, ,	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
		Environment (Yamaguchi City)			
		Zivinomitativ (1 minigutin enj)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
	21	riagi ricatti and wenate center (riagi etty))/2 4 - 10/1	na	1V1 V
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	nd	HV
Tokusiiiiia Fici.	20	Environmental Sciences Center (Tokushima City)	10/1 - 10/2	IIG	11 V
		Environmental Sciences Center (Tokushina City)	10/1 - 10/2		
V D f	20	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/2 - 10/3	1	MV
Kagawa Pref.	29	Ragawa Prefectural Public Swimming Pool (Takamatsu City)	10/23 - 10/28	nd	IVI V
Ehime Pref.	30	Elima Park at and Community Name Park and Office	10/7 10/9	t-(0.04)	HV
Enime Prei.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	tr(0.04)	нv
		(Uwajima City)	10/8 - 10/9		
T. 1 T. 2	2.1	0	10/9 - 10/10	0.20	****
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.20	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.03)	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	nd	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.03)	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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.

[1-10] Decachlorobiphenyl/air (pg/m³)

Monitored year: 2019

Detection Frequency (site): 13/36 (Missing value: 0)
Detection Frequency (sample): 13/36 (Missing value: 0)

	Aggregated value	
Geometric mean	nd	
Median	nd	
Maximum	0.13	
Minimum	nd	

Local communities	No.	Monitored sites	Warm season		Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
			10/5 10/0		
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
It- Du-f	2	Constant Openitor Manifestine Continue (Talianas Cita)	10/9 - 10/10	4	1137
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1 10/1 - 10/2	nd	HV
			10/1 - 10/2		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/2 - 10/3	nd	MV
Miyagi Fiei.	4	(Sendai City)	10/4 - 10/11	nd	IVI V
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	0.05	MV
Ü		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	nd	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	tr(0.03)	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.13	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	tr(0.02)	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	tr(0.03)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
- · · · · · · · · · · · · · · · · · · ·			10/8 - 10/9		
			10/9 - 10/10	1	
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	nd	HV
•			10/16 - 10/17	1	
			10/17 - 10/18]	
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	nd	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	tr(0.02)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	nd	HV
Gilu Prei.	1/	I	10/28 - 10/29	nd	нν
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	nd	HV
		(Yokkaichi City)	10/1 - 10/2		
			10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	nd	HV
		Annex (Osaka City)	10/6 - 10/7		
		(Sudu Chy)	10/7 - 10/8		

Local communities	No.	Monitored sites	Warm season		Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.02)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	nd	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(0.03)	HV
		, ,	10/29 - 10/30	` ′	
			10/30 - 10/31	1	
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.02)	HV
Throsinna City	23	Throshina city Hokaarji vamoi ingii senooi (imesimia city)	9/29 - 9/30	4 (0.02)	11 1
			9/30 - 10/1	1	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
i amaguem Pref.	∠0	Environment (Yamaguchi City)	7/2 4 - 10/1	nu	IVI V
		Environment (ramaguem City)			
	27	W : W 14 1 W 16 G + (W : G')	0/24 10/1	,	107
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
m 1 1:	20		0/20 10/1		
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	nd	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.02)	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.04	HV
			9/25 - 9/26	1	
			9/26 - 9/27	j	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.02)	MV
		g (sugu city)	2.=. 10/1	-()	111
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	nd	HV
120110111010 1 101.	55	Environmental Science (Udo City)	9/25 - 9/26	110	11 4
		Environmental belefied (odd city)	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
wiiyazaki fici.	34		11/3 - 11/12	iiu	IVI V
		Environment (Miyazaki City)			
Vlin B C	25	Was ashing Deefs street Lostitute C. D. 1	10/20 10/20	t-(0,02)	TTX 7
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.02)	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27	1	

Detection frequency (sample) is based on the number of samples, 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.

[2] HCB (Hexachlorobenzene) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

	Aggregated value
Geometric mean	96
Median	99
Maximum	130
Minimum	67

Local communities	No.	Monitored sites	Warm Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	68	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	77	HV
виррого спу	_	Support 7111 1 aix (Support City)	10/8 - 10/9	, ,	11 v
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	100	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	110	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	110	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	110	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	95	MV
Cinou i ici.	ĺ ′	City)	10/27 11/3	,,,	141 4
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	130	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	90	MV
		Comongina Island (Ogusumuu + mage)	10/5 10/5		-11-1
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	110	HV
Kanagawa 1 ter.	10	Ranagawa Environmentai Research Center (Tinatsuka City)	9/25 - 9/26	110	11 4
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	110	MV
		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	80	HV
e			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	91	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	70	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/17 - 10/18 10/28 - 10/29	94	HV
i amanasın Fici.	13	Environment (Kofu City)	10/29 - 10/30	94	пу
		Environment (Rota City)	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	100	MV
2		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	84	HV
	- '	Environmental Sciences (Kakamigahara City)	10/29 - 10/30		•
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	110	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	110	HV
IVIIC I ICI.	17	(Yokkaichi City)	10/1 - 10/2	110	11 V
		(1 Samuelli City)	10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	83	HV
		Annex (Osaka City)	10/6 - 10/7		
	İ	` '	10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
Local communities			Sampling dates	Measured value	All sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	77	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	110	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	67	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	100	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	99	HV
			9/29 - 9/30		
	L		9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	110	MV
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	89	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	110	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	99	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	120	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	110	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	98	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	99	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	85	MV
		Environment (Miyazaki City)			
	<u> </u>				
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	89	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	99	HV
			9/25 - 9/26]	
			9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

[11] HCHs/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: *0.14 Quantification limit: *0.34

	Aggregated value
Geometric mean	31
Median	32
Maximum	330
Minimum	7.6

Local communities	No.	Monitored sites	Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	15	MV
Hokkaido	1	Kamikawa General Suoprefectural Bureau (Asanikawa City)	10/11 - 10/10	13	1 V1 V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	11	HV
Sapporo City		Sapporo Art Fark (Sapporo City)	10/8 - 10/9	11	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	25	HV
Twate I Ici.	3	Sugo Ali Quality Mollitoring Station (Takizawa City)	10/1 - 10/2	23	11 V
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	23	MV
wilyagi i ici.		(Sendai City)	10/4 10/11	23	IVI V
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	30	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	28	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	25	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	54	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	99	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	43	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	24	MV
,		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	35	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	38	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	14	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	40	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	41	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	19	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	39	MV
10.7.0			0/00 10/1	22	
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	23	HV
		(Yokkaichi City)	10/1 - 10/2		
			10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	42	HV
		Annex (Osaka City)	10/6 - 10/7		
	l		10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	20	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	31	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	45	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	8.5	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	27	HV
•			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	62	MV
8		Environment (Yamaguchi City)			
		(g,)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	51	MV
		Tings Treating with Westings County	<i>y,</i> 21 10/1		112 1
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	33	HV
Tokusiiiiia Tiei.	20	Environmental Sciences Center (Tokushima City)	10/1 - 10/2	33	11 V
		Environmental Sciences Center (Tokushima City)	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	33	MV
Kagawa I ICI.	23	Ragawa i refecturar i ubite Swimming i oor (Takamatsu City)	10/23 - 10/28	33	1 V1 V
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	52	HV
Ellinic I ICI.	30	(Uwajima City)	10/7 - 10/8	32	11 V
		(Owajinia City)	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	330	HV
rukuoka Fici.	31	Official City Government Building (Official City)	9/25 - 9/26	330	11 V
C D	22	San Dunfartural Function was at 1 December 1 Court of Cou	9/26 - 9/27	73	MV
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	/3	IVI V
T/ , D C	22	W C D C C 11 C C CD 11 II II II	0/24 0/25	40	1137
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	48	HV
		Environmental Science (Udo City)	9/25 - 9/26		
) (1: D 0	2.4	AC 11D C 11 C 1 C D 1 C 11 II	9/26 - 9/27	1.4	
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	14	MV
		Environment (Miyazaki City)			
			10.20		pr
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	19	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	7.6	HV
			9/25 - 9/26		
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

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

[11-1] α -HCH/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.05 Quantification limit: 0.12

	Aggregated value
Geometric mean	21
Median	21
Maximum	230
Minimum	6.3

Local communities	No.	Monitored sites	Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	11	MV
Hokkaido	1	Kamikawa General Suoprefectural Bureau (Asalikawa City)	10/11 - 10/10	11	1V1 V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	8.6	HV
виррого спу	_	Support First and (Support City)	10/8 - 10/9	0.0	11,
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	19	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	16	MV
		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	21	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	21	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	19	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	38	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	78	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	26	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	16	MV
Tokonama City	- 1 1	(Yokohama City)	10/25 11/3	10	111 1
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	25	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	26	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	11	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	25	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	29	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	13	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	25	MV
) (P 2	10	Mr. D. C W. H I.B	0/20 10/4	16	
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	16	HV
		(Yokkaichi City)	10/1 - 10/2		
0.1.7.0	20		10/2 - 10/3	26	****
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	26	HV
		Annex (Osaka City)	10/6 - 10/7		
	ĺ		10/7 - 10/8		

Hyogo Pref. 21 Hyogo Prefectural Environmental Research Center (Kobe City) 1016 - 1017 1017 - 1018 1017 - 1018 108 - 1099 1099 - 1010 1017 - 1018 108 - 1099 1099 - 1010 1018 - 1017 1018 - 1017 - 1018 108 - 1099 1099 - 1010 1018 - 1017 - 1018 108 - 1099 1019 - 1010 1018 - 1017 - 1018 108 - 1099 1019 - 1010 1018 - 1019 1019 - 1010 1018 - 1019 1019 - 1010 1018 - 1019 1019 - 1010 1018 - 1019 1019 - 1010 1018 - 1019 1019 - 1010 1018 - 1019 1019 - 1010 1018 - 1019 1019 - 1010 1010 1019 - 1010 1019 - 1010 1019 - 1010 1019 - 1010 1019 - 1010 1019 - 1	Local communities	No.	Monitored sites	Warm	season	Air complex
1016 - 1017 1018	Local communities	110.	wiointored sites	Sampling dates	Measured value	Air sampler
Mora Pref. 22 Kobe Institute of Health (Kobe City) 1077 - 108 1078 - 1098 109 1019 - 1010 109 - 1010 109 - 1010 109 - 1010 115 - 116 116 - 117 117 - 118 116 - 117 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 117 - 117 - 118 - 117 - 117 - 118 117 - 117 - 118 - 117 - 117 - 118 - 117 - 117 - 118 - 117 - 117 - 118 - 117 - 117 - 118 - 117 - 117 - 118 - 117 - 117 - 118 - 117 - 117 - 118 - 117 -	Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	13	HV
Robe City 22 Kobe Institute of Health (Kobe City) 107 - 10/8 10/8 - 10/9 10/9 - 10/10 10/9 - 10/10 11/6 - 11/7 11/6 11/6 - 11/7 11/5 - 11/6 11/6 - 11/7 11/7 - 11/8 11/6 - 11/7 11/6 - 11/7 11/6 - 11/7 11/6 - 11/7 11/6 - 11/7 11/6 - 11/6 - 11/7 11/6 - 11/7				10/16 - 10/17		
Nara Pref. 23 Tenri Air Quality Monitoring Station (Tenri City) 11/5 - 11/6 11/6 - 11/7 11/7 - 11/8 11/7 - 11/8 11/7 - 11/8 11/7 - 11/				10/17 - 10/18	1	
Nara Pref. 23 Tenri Air Quality Monitoring Station (Tenri City) 11/5 - 11/6 11/6 - 11/7 11/7 - 11/8 11/7 - 11/8 11/7 - 11/8 11/7 - 11/	Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	20	HV
Nara Pref. 23 Tenri Air Quality Monitoring Station (Tenri City) 11/5 - 11/6 29 HV	,		` */	10/8 - 10/9		
Nara Pref. 23 Tenri Air Quality Monitoring Station (Tenri City) 11/5 - 11/6 11/6 - 11/7 11/8 11/7 -						
Shimane Pref. 24 Oki National Acid Rain Observatory (Okinoshima Town) 10/28 - 10/29 6.8 HV 10/28 - 10/29 10/30 10/30 - 10/31	Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)		29	HV
Shimane Pref. 24 Oki National Acid Rain Observatory (Okinoshima Town) 10/28 10/29 10/30 10/31 10/29 10/30 10/31 10/30 10/30 10/31 10/30 10/30 10/31 10/30			(()		-	
Shimane Pref. 24 Oki National Acid Rain Observatory (Okinoshima Town) 10/28 10/29 10/29 10/30 10/31						
Hiroshima City 25	Shimane Pref	24	Oki National Acid Rain Observatory (Okinoshima Town)		6.8	HV
Hiroshima City 25 Hiroshima City Kokutaiji Junior High School (Hiroshima City 9/28 - 9/29 18 HV 9/28 - 9/30 9/30 - 10/1 9/30 - 10/1 35 MV	Similane 1 lei.	27	Oki i vational 7 teld Rain Observatory (Okinosinina Town)		0.0	111
Hiroshima City 25 Hiroshima City Kokutaiji Junior High School (Hiroshima City 9/28 - 9/29 9/29 - 9/30 18 HV					1	
Yamaguchi Pref. 26 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) 9/24 - 10/1 35 MV	Hiroshima City	25	Hiroshima City Valentaiii Juniar High Sahaal (Hiroshima City)		10	ш
Yamaguchi Pref. 26 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) 9/24 - 10/1 35 MV	Tinosiiiiia City	23	Throshina City Kokutaiji Junioi Tiigii School (Tiiroshinia City)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	10	11 V
Yamaguchi Pref. 26 Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City) 9/24 - 10/1 35 MV 27 Hagi Health and Welfare Center (Hagi City) 9/24 - 10/1 29 MV Tokushima Pref. 28 Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City) 10/1 - 10/2 - 10/3 18 HV Kagawa Pref. 29 Kagawa Prefectural Public Swimming Pool (Takamatsu City) 10/2 - 10/3 20 MV Ehime Pref. 30 Ehime Prefectural Government Nanyo Regional Office (Uwajima City) 10/7 - 10/8 10/9 - 10/10 37 HV Fukuoka Pref. 31 Omuta City Government Building (Omuta City) 9/24 - 9/25 9/25 9/26 230 HV Saga Pref. 32 Saga Prefectural Environmental Research Center (Saga City) 9/24 - 9/25 9/26 9/27 35 HV Kumamoto Pref. 33 Kumamoto Prefectural Institute of Public Health and Environmental Research (Institute for Public Health and Environment (Miyazaki Prefectural Institute for Environmental Research 10/28 - 10/29 9/26 9/27 11 MV Kagoshima Pref. 35 Kagoshima Prefectural Institute for Environmental Research 10/28 - 10/29 10/30 10/31<				********************************	1	
Environment (Yamaguchi City) 27 Hagi Health and Welfare Center (Hagi City) 9/24 - 10/1 29 MV	Vomagual: DC	26	Vomes evolei Duofactivus I Institute of Duli I of II office of		25	N 43.7
Tokushima Pref. 28 Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City) 10/1 - 10/2 10/2 - 10/3 10/2 - 10/3 10/2 - 10/3 10/2 - 10/3 10/2 - 10/3 10/2 - 10/3 10/2 - 10/3 10/2 - 10/3 10/2 - 10/2 10/2 - 10/3 10/2 - 10/2 10/2 - 10/3 10/2 - 10/2 10/2 - 10/3 10/2 - 10/3 10/2 - 10/3 10/2 - 10/3 10/2 - 10/3 10/2 - 10/3 10/3 - 10/3 - 10/3 10/3	Yamaguchi Prei.	26		9/24 - 10/1	33	MV
Environmental Sciences Center (Tokushima City) 10/1 - 10/2 10/2 - 10/3 10/2 - 10/3 10/2 - 10/3		27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	29	MV
Ragawa Pref. 29 Kagawa Prefectural Public Swimming Pool (Takamatsu City) 10/25 - 10/28 20 MV	Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	18	HV
Ragawa Pref. 29 Kagawa Prefectural Public Swimming Pool (Takamatsu City) 10/25 - 10/28 20 MV			Environmental Sciences Center (Tokushima City)	10/1 - 10/2	1	
Ehime Pref. 29 Kagawa Prefectural Public Swimming Pool (Takamatsu City) 10/25 - 10/28 20 MV			`	10/2 - 10/3		
Cuvajima City 10/8 - 10/9 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/30 10/30 - 10/31 10/9 - 10/30 10/9 - 10/30 10/9 - 10/30 10/9 - 10/30 10/9 - 10/25 10/9 - 10/25 10/9 - 10/25 10/9 - 10/25 10/9 - 10/25 10/9 - 10/25 10/9 - 10/30 10/9 - 10/9 - 10/9 10/9 10/9	Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	20	MV
Cuvajima City 10/8 - 10/9 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/10 10/9 - 10/30 10/30 - 10/31 10/9 - 10/30 10/9 - 10/30 10/9 - 10/30 10/9 - 10/30 10/9 - 10/25 10/9 - 10/25 10/9 - 10/25 10/9 - 10/25 10/9 - 10/25 10/9 - 10/25 10/9 - 10/30 10/9 - 10/9 - 10/9 10/9 10/9	Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	37	HV
Tukuoka Pref. 31 Omuta City Government Building (Omuta City) 9/24 - 9/25 230 HV				10/8 - 10/9	1	
Fukuoka Pref. 31 Omuta City Government Building (Omuta City) 9/24 - 9/25 9/25 - 9/26 9/25 - 9/26 9/26 - 9/27 230 HV Saga Pref. 32 Saga Prefectural Environmental Research Center (Saga City) 9/24 - 10/1 46 MV Kumamoto Pref. 33 Kumamoto Prefectural Institute of Public Health and Environmental Science (Udo City) 9/24 - 9/25 9/26 9/25 - 9/26 9/26 - 9/27 35 HV Miyazaki Pref. 34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City) 11/5 - 11/12 11 MV Kagoshima Pref. 35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City) 10/28 - 10/29 13 13 10/29 - 10/30 10/30 - 10/31 HV Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 6.3 HV				10/9 - 10/10		
Saga Pref. 32 Saga Prefectural Environmental Research Center (Saga City) 9/24 - 10/1 46 MV	Fukuoka Pref.	31	Omuta City Government Building (Omuta City)		230	HV
Saga Pref. 32 Saga Prefectural Environmental Research Center (Saga City) 9/24 - 10/1 46 MV Kumamoto Pref. 33 Kumamoto Prefectural Institute of Public Health and Environmental Science (Udo City) 9/25 - 9/26 9/26 - 9/27 Miyazaki Pref. 34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City) 11/5 - 11/12 11 MV Kagoshima Pref. 35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City) 10/29 - 10/30 10/30 - 10/31 Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 9/25 - 9/26			3,			
Saga Pref. 32 Saga Prefectural Environmental Research Center (Saga City) 9/24 - 10/1 46 MV Kumamoto Pref. 33 Kumamoto Prefectural Institute of Public Health and Environmental Science (Udo City) 9/25 - 9/26 9/25 - 9/26 Miyazaki Pref. 34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City) 11/5 - 11/12 11 MV Kagoshima Pref. 35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City) 10/29 - 10/30 10/30 - 10/31 Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 9/25 - 9/26						
Environmental Science (Udo City) 9/25 - 9/26 9/26 - 9/27	Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)		46	MV
Miyazaki Pref. 34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City) 11/5 - 11/12 11 MV Kagoshima Pref. 35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City) 10/29 - 10/30 10/30 - 10/31 Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 6.3 HV	Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	35	HV
Miyazaki Pref. 34 Miyazaki Prefectural Institute for Public Healthand 11/5 - 11/12 11 MV					1	
Miyazaki Pref. 34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City) 11/5 - 11/12 11 MV Kagoshima Pref. 35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City) 10/28 - 10/29 10/30 10/29 - 10/30 10/30 - 10/31 13 HV Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 9/26 9/25 - 9/26 6.3 HV				******		
Environment (Miyazaki City)	Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand		11	MV
and Public Health (Kagoshima City) 10/29 - 10/30 10/30 - 10/31 Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 9/25 - 9/26 HV			· ·	11.0 11/12		272 7
and Public Health (Kagoshima City) 10/29 - 10/30 10/30 - 10/31	Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	13	HV
10/30 - 10/31 Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 6.3 HV 9/25 - 9/26	5		•			
Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25			(**************************			
9/25 - 9/26	Okinawa Pref	36	Cane Hedo (Kunigami Village)		63	HV
	Oxinawa I ICI.	30	Cape 11000 (Kumgami v mage)		0.5	11 V

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

Detection frequency (sample) is based on the number of samples, 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.

[11-2] β -HCH/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.02 Quantification limit: 0.06

	Aggregated value
Geometric mean	2.3
Median	2.4
Maximum	29
Minimum	0.38

Local communities	No.	Monitored sites	Warm Sampling dates	season Measured value	Air sampler
Hokkaido	1	Vomilianus Comenal Submerfectural Duneau (Acabilianus City)	10/11 - 10/18	2.0	MV
ноккатао	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	2.0	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.38	HV
Sapporo City		Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.38	п٧
			10/9 - 10/9		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	1.2	HV
Twate I Ici.	3	Sugo Ali Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	1.2	11 V
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	2.3	MV
1111) agr 1 1011		(Sendai City)	10/1 10/11	2.5	111 1
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	1.9	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	1.1	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	1.1	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	1.6	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	0.84	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	5.3	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	1.4	MV
Tenenumu eng		(Yokohama City)	10/25 11/0		111 1
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	2.5	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	4.4	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	0.80	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	4.7	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	2.9	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	1.3	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	4.4	MV
M. D. C	10	Mr. D. C. e. H. Id. 1D. e. D. e. T. e.	0/20 10/4	2.0	***
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	2.0	HV
		(Yokkaichi City)	10/1 - 10/2		
0.1.2.0	20	0.1.1.4.0.6.4.10	10/2 - 10/3	6.2	777
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	6.2	HV
		Annex (Osaka City)	10/6 - 10/7		
	ĺ		10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
	110.		Sampling dates	Measured value	An sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	1.8	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	2.8	HV
Hooe city		resolve institute of freakin (resolve City)	10/8 - 10/9	2.0	11 1
			10/9 - 10/10	1	
N. D. C	22	T : A: O 1': M :: C(a): (T : C(a))		5.0	1117
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	5.0	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.49	HV
			10/29 - 10/30		
			10/30 - 10/31	1	
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	3.0	HV
,		, , , , , , , , , , , , , , , , , , , ,	9/29 - 9/30	1	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	5.5	MV
i amaguem Piel.	∠0		7/44 - 10/1	3.3	1V1 V
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	5.7	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	3.1	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	3.9	MV
Kagawa I ICI.	23	Ragawa i refecturar i done Swimining i oor (Takamatsu City)	10/23 - 10/28	3.9	IVI V
E1: D C	20	FI: P.C. LC W. P.: LOCC	10/7 10/0	4.0	1117
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	4.0	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	29	HV
			9/25 - 9/26		
			9/26 - 9/27]	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	6.2	MV
8					
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	4.5	HV
Kumamoto Pref.	33		9/24 - 9/25	4.3	пν
		Environmental Science (Udo City)			
	L		9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	0.51	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	2.1	HV
Č	l	and Public Health (Kagoshima City)	10/29 - 10/30		
	l	(8	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	0.42	HV
Okinawa Prei.	30	Cape rieuo (Kuniganii village)		0.42	пv
			9/25 - 9/26		
			9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

[11-3] γ -HCH (synonym:Lindane) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.05 Quantification limit: 0.12

	Aggregated value
Geometric mean	6.4
Median	7.0
Maximum	49
Minimum	0.88

Local communities	No.	Monitored sites		Magazina di vialina	Air sampler
** 11 .1		W 7 9 101 0 10 10 (11 17 0)	Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	2.2	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	1.5	HV
			10/8 - 10/9		
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	4.5	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	3.9	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	6.1	MV
8		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	5.6	MV
Touraki Tiei.		City)	10/23 11/1	5.0	141 4
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	4.5	MV
Ciiioa Prei.	′	City)	10/29 - 11/3	4.3	IVI V
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	14	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	20	MV
		3 (- Basan ana - mage)	-5.0 10/7		212 1
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	11	HV
Kanagawa 1 ICI.	10	Ranagawa Environmentai Research Center (Tinatsuka City)	9/25 - 9/26	11	11 V
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	6.0	MV
i okolialila City	11	(Yokohama City)	10/29 - 11/3	0.0	IVI V
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	7.0	HV
			10/8 - 10/9	,	
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	7.0	HV
,			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	2.2	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
		` ''	10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	9.3	HV
	-	Environment (Kofu City)	10/29 - 10/30		
		<u> </u>	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	8.1	MV
S		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	4.6	HV
G114 1 101.	1 '	Environmental Sciences (Kakamigahara City)	10/29 - 10/30	1.0	11 4
		(Amanagama City)	10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	9.1	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	4.7	HV
		(Yokkaichi City)	10/1 - 10/2		
	I		10/2 - 10/3		
	a ^	0 1 11 15 0 1 10 5 10 5 10 5	10/5 10/5	0.5	
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7	8.5	HV

Local communities	No.	Monitored sites	Warm	season	Air sampler
Local communities	110.	ivionitored sites	Sampling dates	Measured value	Air sampier
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	4.8	HV
			10/16 - 10/17		
			10/17 - 10/18	1	
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	7.6	HV
Rooc City	22	Robe Histitute of Health (Robe City)	10/8 - 10/9	7.0	11 V
				1	
N. D. C	22	The state of the Market Court (The state)	10/9 - 10/10	0.0	****
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	9.9	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	1.2	HV
			10/29 - 10/30		
			10/30 - 10/31	Ì	
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	5.6	HV
,			9/29 - 9/30		
			9/30 - 10/1	1	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	21	MV
i amaguchi Prei.	20		9/24 - 10/1	21	IVI V
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	15	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	11	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
		, , , , , , , , , , , , , , , , , , , ,	10/2 - 10/3	1	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	8.3	MV
Ragawa 1 Ici.	2)	Ragawa i refecturar i done Swimming i oor (Takamatsu City)	10/23 - 10/20	0.5	IVI V
Ehime Pref.	20	Ehime Prefectural Government Nanyo Regional Office	10/7 10/9	0.7	1137
Enime Pref.	30	, ,	10/7 - 10/8	9.7	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	49	HV
			9/25 - 9/26		
			9/26 - 9/27	1	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	18	MV
- 1.6 1 - 1.					
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	8.0	HV
Kumamoto Pref.	33		9/24 - 9/25	0.0	пν
		Environmental Science (Udo City)			
	L .		9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	2.5	MV
		Environment (Miyazaki City)			
	<u> </u>				
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	4.0	HV
-		and Public Health (Kagoshima City)	10/29 - 10/30	1	
]	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	0.88	HV
OKIIIAWA FIEL.	30	Cape fredo (Kunigaini vinage)	9/25 - 9/26	0.00	11 V
	l				
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

[11-4] δ -HCH/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.02 Quantification limit: 0.04

	Aggregated value
Geometric mean	0.46
Median	0.51
Maximum	19
Minimum	tr(0.02)

Local communities	No.	Monitored sites		Magazara d yeshio	Air sampler
** 11 '1	-	W 7 C 101 C 1D (117 C)	Sampling dates	Measured value	-
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	0.20	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.05	HV
заррого Спу		Sapporo Art I ark (Sapporo City)	10/8 - 10/9	0.03	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	0.33	HV
Twate Tiel.	3	Sugo in Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	0.55	11.4
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	0.38	MV
, 6		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	0.53	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	0.55	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.37	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.44	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	0.29	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.93	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.27	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	0.53	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	1.0	HV
			10/16 - 10/17		
*19 * -		717 7 0 17 17 17 17 17 17 17 17 17 17 17 17 17	10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	0.21	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
37 1:D 0	1.7	Y 1'D C 11 C 1 CD 11 Y 11 1	10/17 - 10/18	0.70	****
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	0.70	HV
		Environment (Kofu City)	10/29 - 10/30		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/30 - 10/31 10/24 - 10/31	0.75	MV
ivagaliu riel.	10	(Nagano City)	10/24 - 10/31	0.73	1V1 V
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	0.41	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
	L		10/30 - 10/31	<u> </u>	
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.74	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	0.47	HV
whe riel.	19	(Yokkaichi City)	10/1 - 10/2	0.47	п٧
		(TOKKUIOIII City)	10/1 - 10/2		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3	0.85	HV
Council 101.	20	Annex (Osaka City)	10/6 - 10/7	0.03	11 V
		(10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.25	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.49	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	1.1	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.05	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.29	HV
			9/29 - 9/30	1	
			9/30 - 10/1	1	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	0.73	MV
J		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	0.93	MV
		Tings from and women content (fings only)	2,21 10/1	0.55	
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	0.54	HV
Tokusiiiiiu TTer.	20	Environmental Sciences Center (Tokushima City)	10/1 - 10/2	0.54	11 1
		Environmental Sciences center (Tokushima City)	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/2 - 10/3	0.88	MV
Kagawa 1 ICI.	23	Ragawa i refecturar i ubite Swimming i oor (Takamatsu City)	10/23 - 10/28	0.88	1V1 V
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.85	HV
Ellillic I Ici.	30	(Uwajima City)	10/7 - 10/8	0.65	11 V
		(Owajinia City)	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	19	HV
rukuoka riei.	31	Official City Government Building (Official City)	9/24 - 9/23	. 19	11 V
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
C D C	22		9/26 - 9/27	2.4	MV
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	2.4	MV
T/ . D C	22	Tr D. C 11 . C CD 11; 11 . 14	0/04 0/05	0.06	****
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.96	HV
		Environmental Science (Udo City)	9/25 - 9/26		
) ( 1 · D · 0	24	AC 11D C 11 C 1 C D 11 TI 11	9/26 - 9/27	0.15	107
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	0.15	MV
		Environment (Miyazaki City)			
	L		10/20 10/5		
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.29	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
	ļ		10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	tr(0.02)	HV
			9/25 - 9/26	j l	
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

 $⁽Note\ 4)\ tr: Detection\ limit\ value\ and\ more,\ less\ than\ Quantification\ limit\ value.$ 

#### [14] Polybromodiphenyl ethers (B_E - Br₁₀) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 33/36 (Missing value : 0) Detection Frequency (sample): 33/36 (Missing value: 0)

Detection limit: *0.5 Quantification limit: *1.5

	Aggregated value
Geometric mean	3.7
Median	4.3
Maximum	18
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
** 11 '1	-	W 7 C 101 C 1D (117 C)	Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	1.6	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	11	HV
заррого Спу		Sapporo Art I ark (Sapporo City)	10/8 - 10/9	11	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	tr(0.9)	HV
Twate Tiel.	3	Sugo Thi Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	11(0.5)	11 1
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	6.7	MV
, 6		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	8.7	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	14	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	8.2	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	tr(0.6)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	15	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	9.6	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	2.2	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	18	HV
			10/16 - 10/17		
T13 D 0	1.	717 P. C 17	10/17 - 10/18	. (0.0)	
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	tr(0.8)	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/17 - 10/18 10/28 - 10/29	11	HV
i amanasni Ptel.	13	Environment (Kofu City)	10/28 - 10/29	11	нv
		Environment (Note Ony)	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	3.9	MV
		(Nagano City)	10.01		111
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	10	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	8.4	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	4.3	HV
WHE I ICI.	1)	(Yokkaichi City)	10/1 - 10/2	7.3	11 4
		(	10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	5.8	HV
	_	Annex (Osaka City)	10/6 - 10/7		
		` ''	10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	8.0	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	3.1	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	3.2	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	4.6	HV
		on runeilli ricia rum deservinery (dimesimili revin)	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	16	HV
Tillosiillia City	23	Throshina City Kokutaiji Junioi Tiigii School (Tilioshinia City)	9/29 - 9/30	10	11 V
			*************		
11 D 0	2.	Y 1'D C 4 17 4'4 4 CD 11' Y 14 4	9/30 - 10/1	4.1	3.63.7
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	4.1	MV
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	2.9	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	4.3	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	2.7	HV
2		(Uwajima City)	10/8 - 10/9	2.,	
		(Cwajima City)	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	16	HV
Tukuoka 11ci.	31	Official City Government Building (Official City)	9/25 - 9/26	10	11 V
C D C	22		9/26 - 9/27	. (1.0)	3.637
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(1.0)	MV
		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0/04 0/0-	1.5	
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	4.3	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(1.4)	MV
		Environment (Miyazaki City)			
	L				
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	6.3	HV
=		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
Chimana 1 101.	50	Cape 11000 (Ixamgami + mage)	9/25 - 9/26	110	11 1
			9/26 - 9/27		
	1		9/20 - 9/2/		

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

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

 $⁽Note\ 3)\ HV\colon High\ volume\ air\ sampler\ ,\ MV\colon Medium\ volume\ air\ sampler.$ 

 $⁽Note\ 4)\ tr: Detection\ limit\ value\ and\ more,\ less\ than\ Quantification\ limit\ value.$ 

⁽Note 5) nd: Not detected

⁽Note 6) *: Indicates the sum value of the Quantification [Detection] limits of each congeners.

# [14-1] Tetrabromodiphenyl ethers/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.01 Quantification limit: 0.04

	Aggregated value
Geometric mean	0.25
Median	0.23
Maximum	5.5
Minimum	tr(0.03)

Local communities	No.	Monitored sites		season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	Sampling dates 10/11 - 10/18	tr(0.03)	MV
HOKKAIGO	1	Kainikawa General Suoprefectural Bureau (Asanikawa City)	10/11 - 10/18	u(0.03)	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.05	HV
варрого спу		Sapporo Art I ark (Sapporo City)	10/8 - 10/9	0.03	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	0.42	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	0.18	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	0.07	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	0.38	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	0.22	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	0.55	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	0.26	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26 9/26 - 9/27	1.5	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.64	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	0.30	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/9 - 10/10 10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	5.5	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	0.06	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	0.23	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	0.29	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	0.18	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	1.2	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	0.94	HV
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7 10/7 - 10/8	0.24	HV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.13	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.23	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	0.19	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.33	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.12	HV
,			9/29 - 9/30	***-	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	0.31	MV
i amaguem i ici.	20	Environment (Yamaguchi City)	)/2 <del>7 -</del> 10/1	0.51	1V1 V
		Divironment (1 amaguem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	0.16	MV
	21	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	0.16	IVI V
T 1 1' D C	20	T 1 1' D C ( 1D 11' II 14 D) (' 1 1	0/20 10/1	0.22	1117
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	0.23	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.09	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.18	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	3.9	HV
			9/25 - 9/26		
	L		9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.24	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.84	HV
		Environmental Science (Udo City)	9/25 - 9/26		
		**	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	0.06	MV
,		Environment (Miyazaki City)			
		())			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.18	HV
ragosinila i ici.	] ]	and Public Health (Kagoshima City)	10/29 - 10/29	0.10	11 4
		and I done Health (Nagosiiilia City)			
Okinawa Pref.	26	Constitute (Venicous Villean)	10/30 - 10/31 9/24 - 9/25	t-(0.02)	HV
Okinawa Prei.	36	Cape Hedo (Kunigami Village)		tr(0.03)	нv
			9/25 - 9/26		
			9/26 - 9/27		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

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

# [14-1-1] 2,2',4,4'-Tetrabromodiphenyl ether (#47) /air (pg/ 3 )

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.01 Quantification limit: 0.03

	Aggregated value
Geometric mean	0.18
Median	0.16
Maximum	5.0
Minimum	tr(0.02)

Local communities	No.	Monitored sites	Warm Sampling dates	Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	tr(0.02)	MV
				1(0.02)	
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.03	HV
Заррого Спу	_	Sapporo Art I ark (Sapporo City)	10/8 - 10/9	0.03	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	0.35	HV
Twate Tiel.		Sugo in Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	0.55	11 V
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	0.13	MV
, 8		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	0.06	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	0.21	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.14	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.36	MV
·		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	0.17	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	1.3	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.38	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	0.19	HV
1 11 gata 1 1011		Symmetric Quanty mannering summer (1 mgum eny)	10/8 - 10/9	0.17	
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	5.0	HV
•			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	0.04	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	0.14	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	0.19	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	0.11	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.87	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	0.72	HV
	-	(Yokkaichi City)	10/1 - 10/2	0.,2	
			10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	0.16	HV
		Annex (Osaka City)	10/6 - 10/7		
	1	` ''	10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.09	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.15	HV
			10/8 - 10/9	1	
			10/9 - 10/10	1	
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	0.14	HV
			11/6 - 11/7	1	
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.26	HV
			10/29 - 10/30		
			10/30 - 10/31	1	
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.08	HV
Timesimina enj		Three community and the control of the community of the c	9/29 - 9/30	1	
			9/30 - 10/1	1	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	0.22	MV
i amaguem i ici.	20	Environment (Yamaguchi City)	9/24 - 10/1	0.22	IVI V
		Environment (Tamaguem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	0.11	MV
	21	Hagi Health and Wehare Center (Hagi City)	9/24 - 10/1	0.11	IVI V
T 1 1: D C	20	T 1 1' D C ( 1D 11' II 14 D) (' 1 1	0/20 10/1	0.16	1117
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	0.16	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.07	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.16	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	3.3	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.17	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.74	HV
		Environmental Science (Udo City)	9/25 - 9/26		
		, , , , , , , , , , , , , , , , , , , ,	9/26 - 9/27	1	
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	0.04	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.14	HV
ragosiiiia i ici.		and Public Health (Kagoshima City)	10/29 - 10/30	0.14	11 4
		and I done Heatti (Ragosiiina Oity)	10/29 - 10/30	1	
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	tr(0.02)	HV
Okinawa Prel.	30	Cape riedo (Kuniganii vinage)		ur(0.02)	п٧
			9/25 - 9/26		
			9/26 - 9/27	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) HV: High volume air sampler, MV: Medium volume air sampler.

 $⁽Note\ 4)\ tr: Detection\ limit\ value\ and\ more,\ less\ than\ Quantification\ limit\ value.$ 

## [14-2] Pentabromodiphenyl ethers/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 27/36 (Missing value : 0) Detection Frequency (sample): 27/36 (Missing value: 0)

Detection limit: 0.05 Quantification limit: 0.12

	Aggregated value
Geometric mean	tr(0.10)
Median	tr(0.06)
Maximum	6.1
Minimum	nd

Local communities	No.	Monitored sites		Magazara d yeshio	Air sampler
TT 11 '1	-	W 7 C 101 C 1D (117 C)	Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Samona City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/8 - 10/9	na	НV
			10/8 - 10/9		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	0.22	HV
Iwate Fiel.	3	Sugo Ali Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	0.22	11 V
			10/1 - 10/2		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	tr(0.09)	MV
1111) wg. 1 1011		(Sendai City)	10/11	2(0.05)	212 1
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	0.17	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.31	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.16	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	tr(0.05)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.27	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.22	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
Tilgata Tiel.	12	Gyania 711 Quanty Montoring Station (Migata City)	10/8 - 10/9	nu	11 4
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	6.1	HV
7			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
		·	10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	0.26	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	0.20	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	tr(0.10)	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	10/30 - 10/31 9/24 - 10/1	0.16	MV
- · ·					
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	0.78	HV
		(Yokkaichi City)	10/1 - 10/2		
			10/2 - 10/3		
O 1 D C	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	tr(0.06)	HV
Osaka Pref.		Annex (Osaka City)	10/6 - 10/7	()	

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.06)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.05)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(0.06)	HV
		,	10/29 - 10/30	l i	
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.06)	HV
,			9/29 - 9/30	(* * * * )	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	tr(0.05)	MV
i amagacini i ici.	20	Environment (Yamaguchi City)	7/27-10/1	11(0.03)	1V1 V
		Environment (Tamagaem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
	21	Hagi Health and Wehare Center (Hagi City)	9/24 - 10/1	na	IVI V
T 1 1' D C	20	T 1 1' D C ( 1D 11' II 14 D) (' 1 1	0/20 10/1	. (0.05)	1117
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	tr(0.05)	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.07)	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	tr(0.06)	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.81	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.05)	MV
· ·				l í	
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	1.0	HV
-		Environmental Science (Udo City)	9/25 - 9/26	1	
		` <i>''</i>	9/26 - 9/27	1	
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
,		Environment (Miyazaki City)	-1.0 11.12		1,1
		Ziri i dini di			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.18	HV
Kagosiiiiia 1 101.	33	and Public Health (Kagoshima City)	10/28 - 10/29	0.16	11 V
		and I done ricatii (Nagosiiiiia City)			
01: 20.0	2.	C H 1 (V : 'V'II )	10/30 - 10/31		777.7
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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.

#### [14-2-1] 2,2',4,4',5-Pentabromodiphenyl ether (#99) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 30/36 (Missing value : 0) Detection Frequency (sample): 30/36 (Missing value: 0)

Detection limit: 0.02 Quantification limit: 0.05

	Aggregated value
Geometric mean	0.061
Median	tr(0.04)
Maximum	4.7
Minimum	nd

Local communities	No.	Monitored sites		season Measured value	Air sampler
TT 11 '1	1	W 7 C 101 C 1D (4.17 C)	Sampling dates		
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	tr(0.02)	HV
заррого Спу		Sapporo Art Fark (Sapporo City)	10/8 - 10/9	u(0.02)	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	0.15	HV
Twate Tiel.	3	Sugo An Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	0.13	11 V
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	0.08	MV
1111) wg. 1 1011		(Sendai City)	10/11		112 1
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	0.12	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.25	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.12	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	tr(0.04)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.19	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.13	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	tr(0.03)	HV
8			10/8 - 10/9	(* ***)	
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	4.7	HV
•			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	0.11	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	0.14	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/29 10/20	tr(0.04)	1117
Gilu Prei.	17	Environmental Sciences (Kakamigahara City)	10/28 - 10/29 10/29 - 10/30	u(0.04)	HV
		Environmental Sciences (Kakaililgaliata City)	10/29 - 10/30		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.10	MV
			0.10 0 1 1 1 1	0.55	
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	0.56	HV
		(Yokkaichi City)	10/1 - 10/2		
	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3 10/5 - 10/6	tr(0.03)	****
0.1.5.0		H Igaza Joint Brataatural Lavarnmant Duilding Duilding	10/5 10/6	te(11.11/4.)	HV
Osaka Pref.	20	Annex (Osaka City)	10/6 - 10/7	u(0.03)	11 4

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	tr(0.02)	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.05	HV
			10/8 - 10/9		
			10/9 - 10/10	1	
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.04)	HV
			11/6 - 11/7	ì , , , ,	
			11/7 - 11/8	Ì	
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(0.03)	HV
		, (	10/29 - 10/30	-(0.00)	
			10/30 - 10/31	1	
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.04)	HV
1111 OSIIIII City	23	The second of th	9/29 - 9/30	1 (0.04)	11 4
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/30 - 10/1	tr(0.04)	MV
i amaguchi Pref.	∠0	•	9/24 - 10/1	u(0.04)	IVI V
		Environment (Yamaguchi City)			
		W :W 11 1W 10 G . (V : G'. )	0/04 10/4		
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	tr(0.03)	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.03)	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	tr(0.04)	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10	1	
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.56	HV
			9/25 - 9/26		
			9/26 - 9/27	1	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.03)	MV
Sugu I ICI.	32	Suga i referencia Environmental resouren center (suga city)	9/21 10/1	4(0.03)	111 1
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.85	HV
ixumamoto i ici.	33	Environmental Science (Udo City)	9/25 - 9/26	0.03	11 V
		Environmental Science (Odo City)	9/26 - 9/27		
Missagalsi Daaf	34	Miyragalri Daafaatyyaal Instituta fan Dyklia Haalth - : 1		n d	MV
Miyazaki Pref.	54	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	IVI V
		Environment (Miyazaki City)			
** 1			10/00 10/00	2.1.	*
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.14	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26	]	
			9/26 - 9/27	1	

Detection frequency (sample) is based on the number of samples, 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.

## [14-3] Hexabromodiphenyl ethers/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 15/36 (Missing value : 0) Detection Frequency (sample): 15/36 (Missing value: 0)

Detection limit: 0.05 Quantification limit: 0.13

	Aggregated value
Geometric mean	tr(0.05)
Median	nd
Maximum	0.79
Minimum	nd

Local communities	No.	Monitored sites		season Measured value	Air sampler
TT 11 '1	1	W 7 C 101 C 1D (4.17 C)	Sampling dates		207
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	tr(0.05)	HV
Баррого Спу		Sapporo Art I ark (Sapporo City)	10/8 - 10/9	u(0.03)	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
1		sugerin Quanty Memoring Sunten (Tunizuma eng)	10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	nd	MV
, 5		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
•		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	0.15	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.22	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	tr(0.08)	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.13	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
-			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	0.75	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	0.79	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31	,	
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	tr(0.05)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	0.18	HV
Onu Fiel.	1/	Environmental Sciences (Kakamigahara City)	10/29 - 10/30	0.10	11 V
		Environmental selences (ixakailiiganata City)	10/29 - 10/30		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	tr(0.08)	MV
) (" P 0	10	Mr. D. G W. H I.B	0/20 10/1	. (0.05)	
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	tr(0.05)	HV
		(Yokkaichi City)	10/1 - 10/2		
Osolro D£	20	Ocales Isiat Duefoctural Covernment Duilding Duilding	10/2 - 10/3	L.1	1117
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7	nd	HV
		LADDEX LUSSKS UIVI	10/0 - 10//	i I	

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	nd	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	nd	HV
,			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
i amagacini i ici.	20	Environment (Yamaguchi City)	)/2-T = 10/1	110	1V1 V
		Environment (Tamagaem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
	21	hagi health and wehare center (hagi city)	9/24 - 10/1	na	IVI V
T 1 1' D C	20	T 1 1' D C ( 1D 11' II 14 D) (' 1 1	0/20 10/1	1	1117
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	nd	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.05)	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.20	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	nd	MV
=					
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.23	HV
		Environmental Science (Udo City)	9/25 - 9/26		
		**	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
,		Environment (Miyazaki City)			
		())			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.06)	HV
ragosiiiia i ici.	33	and Public Health (Kagoshima City)	10/29 - 10/29	11(0.00)	11 V
		and I done Health (Nagosiiilia City)			
Okinawa Pref.	26	Comp. H. 4. (Vernison: Villean)	10/30 - 10/31 9/24 - 9/25	nd	HV
Okinawa Prei.	36	Cape Hedo (Kunigami Village)		nd	HV
			9/25 - 9/26		
			9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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.

#### [14-3-1] 2,2',4,4',5,5'-Hexabromodiphenyl ether (#153) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 12/36 (Missing value : 0) Detection Frequency (sample): 12/36 (Missing value: 0)

Detection limit: 0.03 Quantification limit: 0.07

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.35
Minimum	nd

Local communities	No.	Monitored sites	Warm Samulina datas		Air sampler
TT 11 '1	1	W '1 C 1C1 C 1D (A 1'1 C'1)	Sampling dates	Measured value	107
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	tr(0.03)	HV
Support City	_	Support Art Lark (Support City)	10/8 - 10/9	u(0.03)	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
iwate i ici.	3	Sugo in Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	na	11 4
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	nd	MV
wifyagi i ici.		(Sendai City)	10/4 10/11	nu	171 7
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	tr(0.04)	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.08	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	tr(0.05)	MV
·		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	tr(0.06)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
1 11 gata 1 1011		oyunu in Quanty momentug sumon (xingua eny)	10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	0.35	HV
royuma rren.	13	Tollarin Till Quality Monitoring Station (Tollarin City)	10/16 - 10/17	0.55	11.
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
151111111111111111111111111111111111111		Environmental Science (Kanazawa City)	10/16 - 10/17		11.
		Zinvitoimioniai setonee (Izanazawa etay)	10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	0.08	HV
ramanasın rici.	13	Environment (Kofu City)	10/29 - 10/30	0.00	11 4
		Environment (Rota City)	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	tr(0.03)	MV
Truguile Treir	10	(Nagano City)	10/21 10/01	4(0.00)	1.1
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	tr(0.06)	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30	` ′	
		<i>y</i>	10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	nd	HV
		(Yokkaichi City)	10/1 - 10/2		
			10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	nd	HV
		Annex (Osaka City)	10/6 - 10/7		
	l		10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	nd	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	nd	HV
			9/29 - 9/30	1	
			9/30 - 10/1	1	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
S		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	nd	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
		(	10/2 - 10/3	1	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	nd	MV
114844.1101.		Tanga wa 110100 ani 11 dono 2 williaming 1 con (1 ani ani asia city)	10/20 10/20	1.0	111
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.13	HV
1 41140114 1 1 1 1 1	0.	Small city covermient Buruing (cinium city)	9/25 - 9/26	0.15	
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	nd	MV
Sugu 1 Ton	32	Sugar Forectural Environmental research Center (Sugar City)	<i>7/21</i> 10/1	ind.	111 1
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.12	HV
120	33	Environmental Science (Udo City)	9/25 - 9/26	0.12	11 ,
		Zarramana solonos (edo elej)	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
1111 yuzuni 1 ICI.	54	Environment (Miyazaki City)	11/2 11/12	IIG.	1V1 V
		Environment (ivilyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.03)	HV
Kagosiiiila Piel.	33	and Public Health (Kagoshima City)	10/28 - 10/29	u(0.03)	пν
		and I done Heatin (Nagosinina City)			
Ol-i P. C	27	Constitute (Venicous Villean)	10/30 - 10/31	1	1117
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27	1	

Detection frequency (sample) is based on the number of samples, 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.

# [14-3-2] 2,2',4,4',5,6'-Hexabromodiphenyl ether (#154) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 10/36 (Missing value : 0) Detection Frequency (sample): 10/36 (Missing value: 0)

Detection limit: 0.03 Quantification limit: 0.07

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.33
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
			10/8 - 10/9 10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
Twate TTer.	3	Sugo Ali Quanty Montoring Station (Takizawa City)	10/1 - 10/2	na	11 V
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	tr(0.06)	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	0.07	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	tr(0.03)	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26 9/26 - 9/27	nd	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	tr(0.03)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	0.33	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	0.14	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	nd	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	tr(0.04)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	nd	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	tr(0.03)	HV
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7 10/7 - 10/8	nd	HV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	nd	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	nd	HV
•			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
8		Environment (Yamaguchi City)			
		(g (g			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
	- /	Thag Treath and Wellare Celler (Hagi City)	9/21 10/1	na na	111 1
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	nd	HV
Tokusiiiiia Tiei.	20	Environmental Sciences Center (Tokushima City)	10/1 - 10/2	na	111
		Environmental Sciences center (Tokushima City)	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	nd	MV
Kagawa I ICI.	23	Ragawa i refecturar i ubite Swimming i oor (Takamatsu City)	10/23 - 10/28	nu	1 <b>V1 V</b>
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
Ellinic I ICI.	30	(Uwajima City)	10/7 - 10/8	nu	11 V
		(Owajinia City)	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	tr(0.04)	HV
rukuoka Fici.	31	Official City Government Building (Official City)	9/25 - 9/26	u(0.04)	11 V
C D C	22		9/26 - 9/27	1	MV
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	nd	IVI V
T/ , D C	22	W C D C C LI C C CD LI II II II	0/24 0/25	0.00	1137
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.08	HV
		Environmental Science (Udo City)	9/25 - 9/26		
) ( 1: D 0	2.4	AC 11D C 11 C 1 C D 11 TI 11	9/26 - 9/27		107
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
		Environment (Miyazaki City)			
			10.20		
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	nd	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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.

## [14-4] Heptabromodiphenyl ethers/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 24/36 (Missing value : 0) Detection Frequency (sample): 24/36 (Missing value: 0)

Detection limit: 0.1 Quantification limit: 0.3

	Aggregated value
Geometric mean	tr(0.1)
Median	tr(0.1)
Maximum	2.7
Minimum	nd

Local communities	No.	Monitored sites		season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	Sampling dates 10/11 - 10/18	nd	MV
Hokkaido	1	Kamikawa General Suoprefectural Bureau (Asanikawa City)	10/11 - 10/18	na	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	tr(0.1)	HV
заррого Спу		Sapporo Art I ark (Sapporo City)	10/8 - 10/9	u(0.1)	11 V
			10/8 - 10/9		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	tr(0.1)	HV
			10/1 - 10/2	(***)	
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	1.0	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	1.3	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.4	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	tr(0.1)	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.5	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
Inhilanna P. C	1.4	John Iranya Duafa ataua Lu-tituta - CD-1-11- TI - 14 - 1	10/17 - 10/18	1	1117
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17 10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/17 - 10/18	2.7	HV
i amanasın Prei.	13	Environment (Kofu City)	10/28 - 10/29	۷.1	ΠV
		Zin nominom (riota ony)	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	tr(0.2)	MV
<i>G</i>		(Nagano City)		()	
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	1.0	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.8	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	0.3	HV
1,110 1 101.	17	(Yokkaichi City)	10/1 - 10/2	0.5	11 *
		<u>'</u>	10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	tr(0.1)	HV
		Annex (Osaka City)	10/6 - 10/7		
			10/7 - 10/8		

Local communities	No.	Monitored sites	Warm	season	Air sampler
	100.	ivionitored sites	Sampling dates	Measured value	Air sampier
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	tr(0.1)	HV
, ,			10/16 - 10/17	` ′	
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.1)	HV
Rooc City	22	Robe Histitute of Health (Robe City)	10/8 - 10/9	u(0.1)	11 v
N. D. C	22	The state of the Market State of the state o	10/9 - 10/10	. (0.2)	****
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.2)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(0.1)	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.1)	HV
		City)	9/29 - 9/30	(0.1)	21,
			9/30 - 10/1		
V	26	Yamaguchi Prefectural Institute of Public Health and	9/30 - 10/1	1	MV
Yamaguchi Pref.	26		9/24 - 10/1	nd	MV
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	nd	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
		Environmental Sciences Center (Tokushinia City)	10/2 - 10/3	1	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.3	MV
Kagawa Prei.	29	Ragawa Prefectural Public Swimming Pool (Takamatsu City)	10/23 - 10/28	0.5	IVI V
			10.7		
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.9	HV
			9/25 - 9/26	]	
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.1)	MV
Saga 1 ICI.	32	Saga Trefectural Environmental Research Center (Saga City)	)/2 <del>4</del> - 10/1	u(0.1)	IVI V
T/ . D . C	22	TV	0/24 0/25	4 (0.1)	777.7
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(0.1)	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(0.1)	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.1)	HV
12mg001111110 1 101.	55	and Public Health (Kagoshima City)	10/29 - 10/30	4(0.1)	11 1
		and I done Health (Kagosiiinia City)			
01: P.C	2.	C H 1 (K : 'W'II )	10/30 - 10/31	1	777.7
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

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

#### [14-4-1] 2,2',3,3',4,5',6-Heptabromodiphenyl ether (#175) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 7/36 (Missing value : 0) Detection Frequency (sample): 7/36 (Missing value: 0)

Detection limit: 0.02 Quantification limit: 0.04

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.09
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
заррого Спу		Sapporo Art I ark (Sapporo City)	10/7 - 10/8	na	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	nd	MV
		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
C		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	tr(0.02)	MV
Ibaraki i ici.	0	City)	10/23 - 11/1	11(0.02)	IVI V
			10/00 11/2	0.0:	
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.04	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	nd	MV
Ž		Protection (Koto Ward)			
	_	Cl. 1 11 1/O 1/II )	10/3 - 10/9	1	N 43.7
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
W 1 1 C'	11	V 1 1 F : (1C: P 1I ('))	9/26 - 9/27	. (0.02)	) // / / / / / / / / / / / / / / / / /
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	tr(0.02)	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
T D C	12	T. A. O. I. M. A. G. C. (T. G.)	10/9 - 10/10	1	1137
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16 10/16 - 10/17	nd	HV
			10/16 - 10/17		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/17 - 10/18	nd	HV
Ishikawa I ICI.	17	Environmental Science (Kanazawa City)	10/16 - 10/17	na	11 V
		Zin vii diimanimii delegi (Ziminizi vii delegi)	10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	0.09	HV
		Environment (Kofu City)	10/29 - 10/30		
		` ************************************	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	nd	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	tr(0.03)	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30	` ′	
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	tr(0.02)	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	nd	HV
		(Yokkaichi City)	10/1 - 10/2	-	
		[	10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	nd	HV
		Annex (Osaka City)	10/6 - 10/7		
	1		10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	nd	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	nd	HV
•			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
8		Environment (Yamaguchi City)			
		(g (g			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
	- /	Traditional weather (ring)	9/21 10/1	na na	111 1
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	nd	HV
Tokusiiiiia Tiei.	20	Environmental Sciences Center (Tokushima City)	10/1 - 10/2	na	111
		Environmental Sciences center (Tokushima City)	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	nd	MV
Kagawa I ICI.	23	Ragawa i refecturar i ubite Swimming i obi (Takamatsu City)	10/23 - 10/28	nu	1 <b>V1 V</b>
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
Ellinic I ICI.	30	(Uwajima City)	10/7 - 10/8	nu	11 V
		(Owajinia City)	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	tr(0.03)	HV
rukuoka Fici.	31	Official City Government Building (Official City)	9/25 - 9/26	u(0.03)	11 V
C D C	22		9/26 - 9/27	1	MV
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	nd	IVI V
T/ , D C	22	W C D C C LI C C CD LI II II II	0/24 0/25	1	1137
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	nd	HV
		Environmental Science (Udo City)	9/25 - 9/26		
M: 1:B C	2.4	M: 1:D C / 11 // C D 11: 17 14 1	9/26 - 9/27	1	3.43.7
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
		Environment (Miyazaki City)			
			10/20 10/5		
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	nd	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		

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

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

 $⁽Note\ 3)\ HV\colon High\ volume\ air\ sampler\ ,\ MV\colon Medium\ volume\ air\ sampler.$ 

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

## [14-4-2] 2,2',3,4,4',5',6-Heptabromodiphenyl ether (#183) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 19/36 (Missing value : 0) Detection Frequency (sample): 19/36 (Missing value: 0)

Detection limit: 0.03 Quantification limit: 0.07

	Aggregated value
Geometric mean	tr(0.04)
Median	tr(0.03)
Maximum	0.49
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	tr(0.05)	HV
Sapporo City		Sapporo Art Park (Sapporo City)	10/8 - 10/9	u(0.03)	п v
			10/9 - 10/9		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
Twate Tiel.	3	Sugo An Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	na	11 V
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	nd	MV
, 8		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	0.30	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.27	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.16	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	tr(0.04)	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.14	MV
	10		10/5 10/0		****
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
			10/8 - 10/9 10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/9 - 10/10	nd	HV
Toyama Fier.	13	Tollailli Ali Quality Mollitoring Station (Tollailli City)	10/16 - 10/17	na	11 V
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
isiikawa i ici.	* '	Environmental Science (Kanazawa City)	10/16 - 10/17	na	11.
		(	10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	0.49	HV
		Environment (Kofu City)	10/29 - 10/30		
		, , , , , , , , , , , , , , , , , , , ,	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	tr(0.03)	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	0.23	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30 10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.13	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	tr(0.06)	HV
		(Yokkaichi City)	10/1 - 10/2		
0.1.7.6	20		10/2 - 10/3	. (0.04)	777
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	tr(0.04)	HV
		Annex (Osaka City)	10/6 - 10/7		
	ĺ	1	10/7 - 10/8		

Local communities	No.	Monitored sites	Warm season		Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.06)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(0.05)	HV
		,	10/29 - 10/30	l ` ´	
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.04)	HV
,			9/29 - 9/30	( , , ,	
			9/30 - 10/1	1	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
i amagacini i ici.	20	Environment (Yamaguchi City)	7/27-10/1	iid.	1V1 V
		Environment (Tamagaem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
	21	Triagi Treattii and Welfare Center (Tragi City)	9/24 - 10/1	IIU	IVI V
Tokushima Pref.	28	T-11.i D. f1 D1.i. H14. Di	9/30 - 10/1	1	HV
Tokusnima Prei.	28	Tokushima Prefectural Public Health, Pharmaceutical and	************	nd	нv
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
TZ D C	20	W D C + 1D 11; G : D 1/(D1 + G; )	10/2 - 10/3	0.00	107
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.09	MV
	20	TI: D 0 . 10	10/5 10/0		****
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.41	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	nd	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(0.04)	HV
	1	Environmental Science (Udo City)	9/25 - 9/26	]	
	1		9/26 - 9/27	1	
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
•		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.03)	HV
12m50011111111 1 101.		and Public Health (Kagoshima City)	10/29 - 10/30	1 (0.03)	11 4
	1	and I done Hearth (Rugosinina City)	10/29 - 10/30		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
Okiliawa Piel.	30	Cape riedo (Kuniganii vinage)		na	пν
			9/25 - 9/26		
	l		9/26 - 9/27	1	

Detection frequency (sample) is based on the number of samples, 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.

## [14-5] Octabromodiphenyl ethers/air (pg/m³)

Monitored year: 2019

Detection Frequency (site): 32/36 (Missing value: 0) Detection Frequency (sample): 32/36 (Missing value: 0)

Detection limit: 0.1 Quantification limit: 0.3

	Aggregated value
Geometric mean	tr(0.2)
Median	tr(0.2)
Maximum	2.6
Minimum	nd

Local communities	No.	Monitored sites	Warm		Air sampler
Hokkaido	1	Vamilianus Camanal Sulmanafactumal Dunasay (Acabilianus City)	Sampling dates 10/11 - 10/18	Measured value	MV
ноккатао	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	tr(0.1)	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.3	HV
support enj	_	Suppore The Land (Suppore Suff)	10/8 - 10/9	0.5	
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	tr(0.1)	HV
			10/1 - 10/2	` '	
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	tr(0.2)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	tr(0.1)	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	1.2	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	2.1	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.5	MV
•		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.3	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	0.7	MV
i okonama City	11	(Yokohama City)	10/29 11/3	0.7	141 4
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	tr(0.1)	HV
			10/8 - 10/9	, ,	
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	tr(0.2)	HV
			10/16 - 10/17		
* 1 ''		717 P. 0 . 17	10/17 - 10/18		****
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17 10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/17 - 10/18	2.6	HV
i amanasını i ici.	13	Environment (Kofu City)	10/29 - 10/30	2.0	11 V
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	tr(0.2)	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	1.5	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	1.1	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	0.5	HV
IVIIC FICI.	19	(Yokkaichi City)	10/1 - 10/2	0.5	11 V
		(TORRESON City)	10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	0.3	HV
		Annex (Osaka City)	10/6 - 10/7	·	'
	l	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	10/7 - 10/8		

Local communities	No.	Monitored sites	Warm season		Air sampler
ocai communities			Sampling dates	Measured value	An sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	tr(0.2)	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.1)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.2)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.3	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)		0.3	HV
•			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	tr(0.1)	MV
<i>G</i>		Environment (Yamaguchi City)		()	
		( 8 3)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
		g(g))			
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	tr(0.1)	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2	12(012)	
		Zinvinosimia soronoos comor (1 anusamina civy)	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.4	MV
ragawa rier.		reagawa i referencia i aone swimining i oor (rakamatsa enty)	10/23 10/20	0.1	111 1
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	tr(0.1)	HV
		(Uwajima City)	10/8 - 10/9	12(012)	
		3	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	1.5	HV
		-y = = ( e ey )	9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.1)	MV
2454 I 101.	32	Sugar Professional Environmental Research Contact (Sugar City)	2,21 10,1	1(0.1)	111 1
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(0.2)	HV
		Environmental Science (Udo City)	9/25 - 9/26	(0.2)	11.
		(Substitute (	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(0.1)	MV
, uzumi i ici.	J-1	Environment (Miyazaki City)	11/0 11/12	(0.1)	171 7
		Environment (myazaki eny)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.2)	HV
Nagosiiiila Fiel.	33	and Public Health (Kagoshima City)	10/28 - 10/29	u(0.2)	11 V
		and I done Heatin (Nagosinina City)	10/29 - 10/30		
Okinawa Pref.	26	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
Okinawa Prei.	36	Cape riedo (Kuniganii vinage)		na	нv
			9/25 - 9/26		
			9/26 - 9/27		

⁽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) 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 : 2019 Detection Frequency (site) : 34/36 (Missing value : 0) Detection Frequency (sample): 34/36 (Missing value: 0)

Detection limit: 0.1 Quantification limit: 0.3

	Aggregated value
Geometric mean	0.5
Median	0.7
Maximum	3.1
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	0.3	MV
110.111.41	-	Taminiana constant sucpressed and success (community)	10/11 10/10	0.0	112 1
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	1.5	HV
варрого спу		Sapporo Art I ark (Sapporo City)	10/8 - 10/9	1.5	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	tr(0.1)	HV
Twate Tiel.		Sugo Tin Quanty Monitoring Station (Tukizawa City)	10/1 - 10/2	11(0.1)	11,
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	1.0	MV
		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	tr(0.1)	MV
		City)		, ,	
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	1.8	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	3.1	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	1.1	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	tr(0.1)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	1.5	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	1.5	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	0.3	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	0.9	HV
			10/16 - 10/17		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/17 - 10/18 10/15 - 10/16	tr(0.2)	HV
Ishikawa Prei.	14	Environmental Science (Kanazawa City)	10/13 - 10/16	tr(0.2)	п٧
		Environmental Science (Kanazawa City)	10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	1.7	HV
i amanasm i ici.	13	Environment (Kofu City)	10/29 - 10/30	1./	11 V
		Zin vinolimient (12012 etty)	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	0.5	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	2.2	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	1.5	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	0.7	HV
IVIIC FICI.	19	(Yokkaichi City)	10/1 - 10/2	0.7	11 V
		(1 OKKGIOIII City)	10/1 - 10/2		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3	0.9	HV
Osuau 1 101.	20	Annex (Osaka City)	10/6 - 10/7	0.7	11 4
	l	(,	10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	1.0	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.4	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	0.5	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.7	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	1.6	HV
,		, , , , , , , , , , , , , , , , , , , ,	9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	0.5	MV
i amagaciii i ici.	20	Environment (Yamaguchi City)	7/27 - 10/1	0.5	141 4
		Division (Tamagacin City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
	21	hagi health and wehare center (hagi city)	9/24 - 10/1	na	IVI V
T 1 1' D C	20	T 1 1' D C ( 1D 11' II 1/1 D1 ( ' 1 1	0/20 10/1	0.2	1137
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	0.3	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.7	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.3	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	2.2	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.2)	MV
C				, ,	
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.3	HV
		Environmental Science (Udo City)	9/25 - 9/26	·	
		[	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(0.2)	MV
	] -	Environment (Miyazaki City)	11/0 11/12	(0.2)	141 4
		Divisormont (1911) azaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.8	HV
Kagosiiiiia Frei.	33			0.8	п٧
		and Public Health (Kagoshima City)	10/29 - 10/30		
01: 7.0	2.	G H 1 (V : 'V''II )	10/30 - 10/31		****
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
	l		9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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.

## [14-7] Decabromodiphenyl ether/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 32/36 (Missing value : 0) Detection Frequency (sample): 32/36 (Missing value: 0)

Detection limit: 0.1 Quantification limit: 0.3

	Aggregated value
Geometric mean	1.8
Median	2.6
Maximum	14
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	1.2	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	9.4	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	nd	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	5.2	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	nd	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	4.0	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	6.4	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	5.4	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	tr(0.2)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26 9/26 - 9/27	11	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	5.9	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	1.5	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	4.5	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	0.5	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	2.4	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	2.5	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	4.9	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	3.6	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	1.0	HV
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7 10/7 - 10/8	4.2	HV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	6.6	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	2.2	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	2.1	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	3.1	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	14	HV
Throsinna City	23	Throshina City Rokamiji samoi riigii school (riiroshina City)	9/29 - 9/30	17	11 4
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	3.1	MV
i amagucini Piei.	20		9/24 - 10/1	3.1	IVI V
		Environment (Yamaguchi City)			
	27	H : H 14 1W 16 G : (H : G': )	0/24 10/1	,	107
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	2.2	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	2.7	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	2.1	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	6.8	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.3	MV
Sugar 1101.	J 2	Sugur research content (sugur croy)	2,21 10/1	0.5	
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	1.6	HV
Kumamoto 1 ici.	33	Environmental Science (Udo City)	9/25 - 9/26	1.0	11 V
		Environmental Science (Odo City)	9/26 - 9/27		
Missagalsi Daaf	34	Missoralsi Duofaatsuud Instituta fan Duhlia Haalthand		0.9	MV
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	0.9	IVI V
		Environment (Miyazaki City)			
TZ 1: 70 0	2.5	II. II. D.C. III. C. C. D. C.	10/20 10/20	4.6	****
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	4.8	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
	l		9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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.

## [15] Perfluorooctane sulfonic acid (PFOS) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.3 Quantification limit: 0.8

	Aggregated value
Geometric mean	3.8
Median	4.1
Maximum	7.8
Minimum	1.3

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	6.7	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8 10/8 - 10/9	5.5	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	10/9 - 10/10 9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	1.9	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	7.5	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	7.7	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	7.8	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	6.1	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	5.7	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	6.9	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26 9/26 - 9/27	1.7	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	3.2	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	2.5	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	4.1	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	5.6	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	4.0	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	7.3	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	3.5	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	7.4	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	3.0	HV
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7 10/7 - 10/8	3.3	HV

Local communities	No.	Monitored sites		season	Air sampler
Local communities			Sampling dates	Measured value	All sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	2.0	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	1.4	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	1.4	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	4.2	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	1.3	HV
			9/29 - 9/30		
	L		9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	7.4	MV
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	6.6	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	3.4	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3	1	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	3.7	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	4.4	HV
		(Uwajima City)	10/8 - 10/9	1	
			10/9 - 10/10	1	
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	2.2	HV
			9/25 - 9/26		
			9/26 - 9/27	1	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	4.6	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	1.5	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	2.7	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	2.3	HV
		and Public Health (Kagoshima City)	10/29 - 10/30	1	
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	5.7	HV
			9/25 - 9/26	]	
	l		9/26 - 9/27	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) HV: High volume air sampler , MV: Medium volume air sampler.

## [16] Perfluorooctanoic acid (PFOA) /air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.3 Quantification limit: 0.8

	Aggregated value
Geometric mean	14
Median	14
Maximum	46
Minimum	5.5

Local communities	No.	Monitored sites		season	Air sampler
	110.		Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	5.6	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	5.5	HV
11 7			10/8 - 10/9		
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	8.5	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	14	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	12	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	20	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	46	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	16	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	18	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26 9/26 - 9/27	29	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	13	MV
N 1 D. C	12	O ALO EL MILLE SUE OFFI A CEL	10/7 - 10/8	10	HV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	10	HV
Toyama Pref.	12	Tonami Air Quality Monitoring Station (Tonami City)	10/9 - 10/10 10/15 - 10/16	12	HV
Toyama Prei.	13	Tonami Air Quanty Monitoring Station (Tonami City)	10/13 - 10/16	12	п٧
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/17 - 10/18	14	HV
isiiikawa i ici.	1.4	Environmental Science (Kanazawa City)	10/16 - 10/17	17	11 V
		Environmental Science (Runazawa City)	10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/17 - 10/18	18	HV
i amanasını i içi.	1.5	Environment (Kofu City)	10/29 - 10/30	10	11 7
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	12	MV
Cif. P	17	Cife Duefestand Descend Linting C. H. 141	10/29 10/20	12	7117
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	12	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	10/30 - 10/31 9/24 - 10/1	19	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	17	HV
		(Yokkaichi City)	10/1 - 10/2		
	<u> </u>		10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	43	HV
		Annex (Osaka City)	10/6 - 10/7		
	Ì		10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
	110.		Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	9.8	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	9.1	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	8.2	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	21	HV
		, (	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	16	HV
Throsinna City	23	Timosimia City Rokaaaji samoi Tiigii school (Timosimia City)	9/29 - 9/30	10	11 4
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	23	MV
i amagucini Piei.	20	•	9/24 - 10/1	23	IVI V
		Environment (Yamaguchi City)			
	27	H : H 14 1W 16 G : (H : G': )	0/24 10/1	26	107
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	36	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	11	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	5.9	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	28	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	16	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	5.6	MV
		[g(g))	,,_,		
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	8.1	HV
ramamoto i ici.	33	Environmental Science (Udo City)	9/25 - 9/26	0.1	11 4
		Environmental belefice (edo city)	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	21	MV
wiiyazaki Fiel.	34		11/3 - 11/12	21	IVI V
		Environment (Miyazaki City)			
TZ 1: 70 0	2.5	Tr. 1: D.C. 11 C. C.D.	10/20 10/20	1.0	****
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	10	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	7.3	HV
			9/25 - 9/26		
			9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

## [17] Pentachlorobenzene/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.04 Quantification limit: 0.09

	Aggregated value
Geometric mean	64
Median	64
Maximum	110
Minimum	36

Local communities	No.	Monitored sites		season Magazard value	Air sampler
II alde-14	1	Vamiliarya Cananal Suhmafaata1 Dawa (A1-il C')	Sampling dates 10/11 - 10/18	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	42	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	39	HV
			10/8 - 10/9		
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	69	HV
			10/1 - 10/2		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/2 - 10/3 10/4 - 10/11	55	MV
wiiyagi i ici.		(Sendai City)	10/4 - 10/11	33	1V1 V
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	61	MV
r umagata 1 101.		City)	9/21 10/1	01	111 1
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	75	MV
		City)			
ar a a		NIT W. LING TO NO. 12 N	10/00 11/5	0.4	
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	84	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	110	MV
i okyo Met.	0	Protection (Koto Ward)	10/43 - 11/1	110	IVI V
		Trocolon (Ixolo Wala)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	43	MV
		<i>"</i>			• •
V B C	10	V	0/24 0/25	93	HV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26	93	HV
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	90	MV
Tokonama City		(Yokohama City)	10/25 11/3		111 1
M D C	12	O ALO IN M. IN SUCCESSION	10/7 10/0	12	1137
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	42	HV
			10/8 - 10/9 10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/9 - 10/10	100	HV
Toyama Tici.	13	Tolianii Ali Quanty Monitoring Station (Tolianii City)	10/16 - 10/17	100	11 V
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	48	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	79	HV
		Environment (Kofu City)	10/29 - 10/30	]	
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	71	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	76	HV
GHu I ICI.	1 /			7.0	11 V
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	77	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	62	HV
		(Yokkaichi City)			
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	58	HV
		Annex (Osaka City)	10/6 - 10/7		
			10/7 - 10/8		
Nagoya City  Mie Pref.	18	Environmental Sciences (Kakamigahara City)  Chikusa Ward Heiwa Park (Nagoya City)  Mie Prefecture Health and Environment Research Institute (Yokkaichi City)  Osaka Joint Prefectural Government Building, Building 2	9/30 - 10/1 10/3 - 10/31 9/24 - 10/1 9/30 - 10/1 10/1 - 10/2 10/2 - 10/3 10/5 - 10/6 10/6 - 10/7	77 62	MV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	41	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	88	HV
			10/8 - 10/9		
			10/9 - 10/10	1	
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	49	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	58	HV
Similare 1 fer.	27	Oki National Neid Rain Goselvatory (Okinosinina Town)	10/29 - 10/30	30	11 4
			10/30 - 10/31		
III	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	100	HV
Hiroshima City	25	Hirosnima City Kokutaiji Junior High School (Hirosnima City)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	100	нv
			9/29 - 9/30		
	L		9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	9/24 - 10/1	65	MV
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	47	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	64	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3	]	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	68	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	80	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	99	HV
			9/25 - 9/26		
			9/26 - 9/27	1	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	62	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	64	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)	11/5 - 11/12	48	MV
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	56	HV
ragosiiiiia i iti.	33		10/28 - 10/29	30	11 V
		and Public Health (Kagoshima City)			
01.	2.5		10/30 - 10/31	2.5	
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	36	HV
			9/25 - 9/26		
	1		9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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.

## [19] 1,2,5,6,9,10-Hexabromocyclododecanes/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 26/36 (Missing value : 0) Detection Frequency (sample): 26/36 (Missing value: 0)

Detection limit: *0.4 Quantification limit: *0.9

	Aggregated value
Geometric mean	tr(0.7)
Median	tr(0.8)
Maximum	5.7
Minimum	nd

Local communities	No.	Monitored sites		Magazara d yeshio	Air sampler
** 11 .1		W 1 0 101 0 1D (111 0)	Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	2.3	MV
			10/5 10/0		
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	1.2	HV
			10/1 - 10/2		
14: 'D C		DE ID C . IX C . CD III W III I I I	10/2 - 10/3	1	207
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	tr(0.4)	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	tr(0.6)	MV
		City)		, ,	
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	1.3	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	3.0	MV
y - 11100		Protection (Koto Ward)			212 1
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	2.2	MV
		,(-g			
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	1.2	HV
Č		, , ,	9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	1.8	MV
•		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	tr(0.4)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	2.0	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	tr(0.5)	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	nd	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	5.7	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	1.4	HV
Ollu FICI.	1/	Environmental Sciences (Kakamigahara City)	10/29 - 10/30	1.7	11 V
		Environmental beforees (Kakaninganara City)	10/29 - 10/30		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	tr(0.6)	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	nd	HV
		(Yokkaichi City)	10/1 - 10/2		
			10/2 - 10/3		
	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	1.1	HV
Osaka Pref.	20	Annex (Osaka City)	10/6 - 10/7		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	1.2	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.6)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.7)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	3.4	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	2.1	HV
,			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
i amaguem i iei.	20	Environment (Yamaguchi City)	)/2 <del>4</del> - 10/1	na	IVI V
		Environment (Tamaguem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
	21	Hagi Health and Wehare Center (Hagi City)	9/24 - 10/1	na	IVI V
T 1 1' D C	20	T 1 1' D C ( 1D 11' II 14 D) (' 1 1	0/20 10/1	1	1117
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	nd	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	1.1	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	tr(0.8)	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	1.0	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	nd	MV
-					
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	nd	HV
		Environmental Science (Udo City)	9/25 - 9/26		
		, , , , ,	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(0.5)	MV
,		Environment (Miyazaki City)		( )	
		(,, /			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	1.5	HV
13mgosiiiiia 1 ici.	) )	and Public Health (Kagoshima City)	10/29 - 10/29	1.5	11 V
		and I done Health (Kagoshilila City)	10/29 - 10/30		
Okinawa Pref.	26	Comp. H. 4. (Varginossi Villand)	9/24 - 9/25	nd	HV
Okinawa Prei.	36	Cape Hedo (Kunigami Village)		nd	HV
			9/25 - 9/26		
	l		9/26 - 9/27		

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

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

 $⁽Note\ 3)\ HV\colon High\ volume\ air\ sampler\ ,\ MV\colon Medium\ volume\ air\ sampler.$ 

 $⁽Note\ 4)\ tr: Detection\ limit\ value\ and\ more,\ less\ than\ Quantification\ limit\ value.$ 

⁽Note 5) nd : Not detected

⁽Note 6) *: Indicates the sum value of the Quantification [Detection] limits of each isomers.

## [19-1] $\alpha$ -1,2,5,6,9,10-Hexabromocyclododecane/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 35/36 (Missing value : 0) Detection Frequency (sample): 35/36 (Missing value: 0)

Detection limit: 0.1 Quantification limit: 0.3

	Aggregated value
Geometric mean	0.5
Median	0.5
Maximum	4.1
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	2.0	MV
поккано	1	Kamikawa General Suoprefectural Bureau (Asanikawa City)	10/11 - 10/18	2.0	IVI V
Samona City	2	Song one Art Dook (Song one City)	10/7 - 10/8	tu(0,2)	HV
Sapporo City	2	Sapporo Art Park (Sapporo City)		tr(0.2)	HV
			10/8 - 10/9		
	-		10/9 - 10/10	0.0	
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	0.9	HV
			10/1 - 10/2		
			10/2 - 10/3	(0.1)	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	tr(0.1)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	0.3	MV
Č		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	0.3	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.8	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	1.4	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	1.7	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.8	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.9	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	0.3	HV
· ·			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	0.4	HV
·			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	0.4	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
		`	10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	tr(0.2)	HV
		Environment (Kofu City)	10/29 - 10/30	(2)	
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	4.1	MV
<u> </u>		(Nagano City)	2.2.2		·
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	0.8	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.5	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	tr(0.2)	HV
		(Yokkaichi City)	10/1 - 10/2	(2)	
			10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	0.6	HV
5 54114 I 101.		Annex (Osaka City)	10/6 - 10/7	0.0	21 7
	1	(	10/7 - 10/8		

Local communities	No.	Monitored sites	Warm	season	Air sampler
Local communities	INO.	Worthorea sites	Sampling dates	Measured value	All sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	1.0	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.5	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	0.4	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	1.8	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	1.1	HV
			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	9/24 - 10/1	tr(0.1)	MV
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	tr(0.1)	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	tr(0.2)	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2	` ′	
		•	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.7	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.6	HV
Emme Prei.	30	(Uwajima City)	10/7 - 10/8	0.0	п٧
		(Owajima City)			
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	10/9 - 10/10 9/24 - 9/25	0.8	HV
rukuoka Piei.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.8	пν
C Df	32	Construction of the Control Co	9/26 - 9/27	t-(0,2)	MV
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.2)	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(0.1)	HV
		Environmental Science (Udo City)	9/25 - 9/26	1	
		•	9/26 - 9/27	1	
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)	11/5 - 11/12	0.4	MV
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	1.2	HV
		and Public Health (Kagoshima City)	10/29 - 10/30	1	
			10/30 - 10/31	1	
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26	1	
			9/26 - 9/27	j	

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

Detection frequency (sample) is based on the number of samples, 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

## [19-2] $\beta$ -1,2,5,6,9,10-Hexabromocyclododecane/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 26/36 (Missing value : 0) Detection Frequency (sample): 26/36 (Missing value: 0)

Detection limit: 0.08 Quantification limit: 0.21

	Aggregated value
Geometric mean	tr(0.13)
Median	tr(0.15)
Maximum	1.2
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler	
			Sampling dates	Measured value		
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	0.31	MV	
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV	
			10/8 - 10/9			
			10/9 - 10/10			
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	0.35	HV	
			10/1 - 10/2			
			10/2 - 10/3			
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	nd	MV	
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	tr(0.09)	MV	
1 umuguu 1 Ten		City)	<i>y</i> /21 10/1	2(0.03)	112 1	
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	tr(0.11)	MV	
		City)				
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.28	MV	
		City)				
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.40	MV	
		Protection (Koto Ward)				
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	tr(0.15)	MV	
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.21	HV	
			9/25 - 9/26			
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	0.24	MV	
		(Yokohama City)				
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	tr(0.09)	HV	
			10/8 - 10/9			
			10/9 - 10/10			
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	tr(0.15)	HV	
			10/16 - 10/17			
			10/17 - 10/18			
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	tr(0.10)	HV	
		Environmental Science (Kanazawa City)	10/16 - 10/17			
			10/17 - 10/18			
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	nd	HV	
		Environment (Kofu City)	10/29 - 10/30			
			10/30 - 10/31			
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	1.2	MV	
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	0.30	HV	
J. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- '	Environmental Sciences (Kakamigahara City)	10/29 - 10/30	0.50		
			10/30 - 10/31			
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	tr(0.12)	MV	
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	nd	HV	
		(Yokkaichi City)	10/1 - 10/2			
			10/2 - 10/3			
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	tr(0.16)	HV	
		Annex (Osaka City)	10/6 - 10/7			
		1	10/7 - 10/8			

Local communities	No.	Monitored sites	Warm	season	Air sampler
Local communities			Sampling dates	Measured value	All sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.22	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(0.14)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.09)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.64	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.44	HV
			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	9/24 - 10/1	nd	MV
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	nd	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.18)	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	tr(0.18)	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	tr(0.15)	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	nd	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	nd	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)	11/5 - 11/12	tr(0.11)	MV
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.35	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

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

## [19-3] $\gamma$ -1,2,5,6,9,10-Hexabromocyclododecane/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 15/36 (Missing value : 0) Detection Frequency (sample): 15/36 (Missing value: 0)

Detection limit: 0.2 Quantification limit: 0.4

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	1.5
Minimum	nd

Local communities	No.	Monitored sites		season Measured value	Air sampler
TT-1414-	1	Vanishana Caranal Salamafa tanal Danasa (Alahihana Cita)	Sampling dates 10/11 - 10/18		MX7
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
G. G.		G 4 P 1 (G G'V)	10/7 10/0		1117
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
	_		10/9 - 10/10		****
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
			10/1 - 10/2		
			10/2 - 10/3	(0.0)	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	tr(0.2)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
_		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	tr(0.2)	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	tr(0.2)	MV
		City)	-		
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	1.2	MV
y - 111400		Protection (Koto Ward)			212 1
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	tr(0.3)	MV
		,		()	
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	tr(0.2)	HV
Č			9/25 - 9/26	, ,	
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	0.7	MV
,		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	1.5	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	nd	HV
		Environment (Kofu City)	10/29 - 10/30		
	L		10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	0.4	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	tr(0.3)	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	nd	MV
M. P. C	10	M. D. C. d. H. H. L. D. C. D. L. Y. C.	0/20 10/1	,	****
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	nd	HV
		(Yokkaichi City)	10/1 - 10/2		
Osaka Pref.	20	Oralla Islant Desfortant C. (D. 117 D. 117 C.	10/2 - 10/3	£=(0, 2)	TTT 7
Usaka Pret	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	tr(0.3)	HV
Obaka 11ci.		Annex (Osaka City)	10/6 - 10/7		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.2)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	1.0	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.6	HV
Ĭ		, , , , , , , , , , , , , , , , , , , ,	9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
I minuguein I iei.	20	Environment (Yamaguchi City)	2,21 10/1	110	171 7
		Environment (Tuniaguem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
	21	magnificatin and wenare center (magnetry)	9/24 - 10/1	IIG	1 <b>V1 V</b>
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	nd	HV
Tokushina Pref.	20	· ·	10/1 - 10/2	na	п٧
		Environmental Sciences Center (Tokushima City)			
IZ D.C	20	W D C + 1D 11' C : D 1/T 1 + C'+	10/2 - 10/3	. (0.2)	107
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.2)	MV
El: D C	20	El. B.C. 1C AND B. 1000	10/7 10/0	1	1117
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
		(Uwajima City)	10/8 - 10/9		
T. 1 T. 0	2.1	0 . 6. 6	10/9 - 10/10		****
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	nd	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	nd	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	nd	HV
=		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
		1	9/25 - 9/26		
	l		9/26 - 9/27	ı l	

Detection frequency (sample) is based on the number of samples, 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] Total Polychlorinated naphthalenes/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: *0.2 Quantification limit: *0.6

	Aggregated value
Geometric mean	100
Median	130
Maximum	1,100
Minimum	6.5

Local communities	No.	Monitored sites	Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	67	MV
Hokkaido	1	Kamikawa General Suoprefectural Bureau (Asanikawa City)	10/11 - 10/10	07	141 4
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	35	HV
Sapporo City		Sapporo Art Fark (Sapporo City)	10/8 - 10/9	33	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	43	HV
Twate I Ici.	3	Sugo Ali Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	43	11 V
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	67	MV
wiiyagi i ici.		(Sendai City)	10/4 - 10/11	07	IVI V
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	52	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	140	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	160	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	190	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	26	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	180	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	270	MV
i okonama City	11	(Yokohama City)	10/2) - 11/3	270	IVI V
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	56	HV
-			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	130	HV
•			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	60	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	140	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	190	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	59	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
	L		10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	150	MV
) (; P 0	10	Mr. D. G W. H LD	0/20 10/4		****
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	64	HV
		(Yokkaichi City)	10/1 - 10/2		
			10/2 - 10/3	1.50	
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	120	HV
		Annex (Osaka City)	10/6 - 10/7		
	l		10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	69	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	74	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	500	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	12	HV
Similare 1 ret.		OKI I talional Field Italii Observatory (Okinosimila 1041)	10/29 - 10/30	12	11 '
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	160	HV
Tillosiillia City	23	Throshina City Rokutaiji Junioi Tilgii School (Tiroshina City)	9/29 - 9/30	100	11 V
			*************		
37 1:B 0	2.	Y 1'D C 4 17 4'4 4 CD 11' Y 14 4	9/30 - 10/1	1.100	3.657
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	1,100	MV
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	390	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	470	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
		, , , , , , , , , , , , , , , , , , ,	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	380	MV
· ·					
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	180	HV
2		(Uwajima City)	10/8 - 10/9	100	
		(Cwajima City)	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	230	HV
Tukuoka 11ci.	31	Official City Government Building (Official City)	9/25 - 9/26	230	11 V
C D C	22		9/26 - 9/27	210	107
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	210	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	89	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	22	MV
		Environment (Miyazaki City)			
	L				
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	64	HV
-		and Public Health (Kagoshima City)	10/29 - 10/30		
		, 5	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	6.5	HV
OKIIIawa I ICI.	50	Cape 11000 (Kumgumi + mugo)	9/25 - 9/26	0.5	11 4
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

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

## [20-1] Monochlorinated naphthalenes/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.03 Quantification limit: 0.08

	Aggregated value
Geometric mean	68
Median	81
Maximum	800
Minimum	4.0

Local communities	No.	Monitored sites		Magazara d yeshio	Air sampler
** 11 .1		W 7 9 101 0 10 10 (11 17 0)	Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	53	MV
			10/5 10/0		
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	28	HV
			10/8 - 10/9		
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	30	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	45	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	33	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	95	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	120	MV
Cinoa i ici.	,	City)	10/27 - 11/3	120	1V1 V
			10/05	100	
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	120	MV
		1 rotection (Note waite)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	5.8	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	120	HV
		g,,	9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	170	MV
Tononama eng		(Yokohama City)	10/25 11/0	170	111 1
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	32	HV
1111841411111		grand in Quanty memoring sumen (ringular enty)	10/8 - 10/9	32	
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	83	HV
10) 41114 11011	10	remain rin Quanty memoring states (remain eng)	10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	40	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		•
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	92	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	150	MV
Č		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	34	HV
J.1 1 101.	- '	Environmental Sciences (Kakamigahara City)	10/29 - 10/30		11 ,
		(Amanagama City)	10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	91	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	48	HV
		(Yokkaichi City)	10/1 - 10/2		
	20	0.1.1:(0.6)(1.0)	10/2 - 10/3	70	****
0 1 5 0		Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	78	HV
Osaka Pref.	20	Annex (Osaka City)	10/6 - 10/7	, 0	

Local communities	No.	Monitored sites	Warm	season	Air sampler
Local communities	INO.	Wollitored sites	Sampling dates	Measured value	All sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	52	HV
			10/16 - 10/17		
			10/17 - 10/18	1	
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	47	HV
·		` */	10/8 - 10/9	ĺ	
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	440	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	7.3	HV
Similare 1 rei.		OKI I Vational Flora Rain Observatory (Okinosimia 10411)	10/29 - 10/30	7.5	11 '
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	100	HV
Tinosiniia City	23	Timosimia City Rokumji Jumoi Tiigii School (Timosiiilia City)	9/29 - 9/30	100	11 4
			9/30 - 10/1	1	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/30 - 10/1	800	MV
i amaguciii Prei.	20	Environment (Yamaguchi City)	9/24 - 10/1	800	IVI V
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	220	MV
	21	Tragi Treatin and Wenare Center (Tragi City)	)/24 - 10/1	220	IVI V
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	350	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	290	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	130	HV
		(Uwajima City)	10/8 - 10/9		
		(C wajina chij)	10/9 - 10/10	1	
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	150	HV
1 41140114 1 1 1 1 1	0.1	Simulate City Severimient Bunding (Simulate City)	9/25 - 9/26	150	
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	140	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	60	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)	11/5 - 11/12	14	MV
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	31	HV
		and Public Health (Kagoshima City)	10/29 - 10/30	".	11.
		and I done Health (Rugoomina Orty)	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	4.0	HV
Okiliawa Piel.	30	Cape ricao (Kumgami v mage)	9/24 - 9/25	4.0	п٧
		1	9/26 - 9/27	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) HV: High volume air sampler , MV: Medium volume air sampler.

## [20-2] Dichlorinated naphthalenes/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.02 Quantification limit: 0.06

	Aggregated value
Geometric mean	17
Median	17
Maximum	250
Minimum	1.3

Local communities	No.	Monitored sites	Warm Sampling dates	Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	9.2	MV
110.111.41		Committee Constitution of the Constitution of	10/11 10/10	7.2	112 1
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	4.9	HV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	4.9	п v
			10/8 - 10/9		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	5.9	HV
Iwate Fiel.	3	Sugo Ali Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	3.9	11 V
			10/1 - 10/2		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	13	MV
wiiyagi i ici.	7	(Sendai City)	10/4 - 10/11	13	1 <b>V1 V</b>
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	7.7	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	19	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	19	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	31	MV
•		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	3.0	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	33	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	40	MV
		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	13	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	30	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	14	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	17	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	30	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	9.6	HV
J.16 1 101.	'	Environmental Sciences (Kakamigahara City)	10/29 - 10/30	7.0	11.7
		(	10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	25	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	7.6	HV
1,110 1 101.	'	(Yokkaichi City)	10/1 - 10/2	,.0	11 7
		(	10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	15	HV
		Annex (Osaka City)	10/6 - 10/7		
	l		10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
	INO.		Sampling dates	Measured value	An sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	8.3	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	12	HV
Hooe city		resolve institute of freakin (resolve City)	10/8 - 10/9	12	11 1
			10/9 - 10/10	1	
N. D. C	22	T : A: O 1': M :: C(a): (T : C(a))		35	1117
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	33	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	2.4	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	30	HV
,		, , , , , , , , , , , , , , , , , , , ,	9/29 - 9/30	1	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	250	MV
i amaguem Piel.	∠0		7/44 - 10/1	230	1V1 V
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	140	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	94	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2	Ì	
		, , , , , , , , , , , , , , , , , , , ,	10/2 - 10/3	1	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	61	MV
Ruguwa 1 Ici.	2)	Ragawa Percetara Paone Swimming Poor (Pakamatsa City)	10/23 10/20	01	141 4
Ehime Pref.	20	Ehime Prefectural Government Nanyo Regional Office	10/7 10/9	20	1137
Enime Prei.	30	, ,	10/7 - 10/8	29	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	33	HV
			9/25 - 9/26		
			9/26 - 9/27	1	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	48	MV
		Canga City)		'~	
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	17	HV
Kumamoto Pref.	33			1 /	нv
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	4.2	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	15	HV
<i>5</i> 2 2 2 2 1		and Public Health (Kagoshima City)	10/29 - 10/30		
		(Lingsomma City)	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	1.3	HV
Okinawa Pref.	30	Cape riedo (Kunigami village)		1.3	нv
			9/25 - 9/26		
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

## [20-3] Trichlorinated naphthalenes/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.02 Quantification limit: 0.06

	Aggregated value
Geometric mean	6.2
Median	7.1
Maximum	30
Minimum	0.69

Local communities	No.	Monitored sites	Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	2.8	MV
Hokkaido	1	Kallikawa General Suoprefectural Bureau (Asalikawa City)	10/11 - 10/10	2.0	1 <b>V1 V</b>
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	1.0	HV
виррого спу	_	Support Fire Fair (Support City)	10/8 - 10/9	1.0	11.
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	3.3	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	3.1	MV
, 0		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	5.3	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	11	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	8.5	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	19	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	10	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	12	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	24	MV
,		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	3.4	HV
_			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	12	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	4.6	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	8.7	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	6.5	MV
		(Ivagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	6.8	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	9.4	MV
Mi- D. C	10	Mis Du Carron Hadda and David	0/20 10/1	2.7	7117
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	3.7	HV
		(Yokkaichi City)	10/1 - 10/2		
0.1.7.0	20		10/2 - 10/3	0.0	****
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	8.9	HV
		Annex (Osaka City)	10/6 - 10/7		
	Ì		10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	3.2	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	6.4	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	8.4	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.96	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	9.6	HV
		,	9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	30	MV
i amaguem i ici.	20	Environment (Yamaguchi City)	)/2 <del>7 -</del> 10/1	30	1V1 V
		Divironment (1 amaguem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	16	MV
	21	Tragi Treattil and Welfare Center (Tragi City)	9/24 - 10/1	10	IVI V
Tokushima Pref.	28	Tolyyohima Duefoetymal Dyklie Health, Dhamma coytical and	9/30 - 10/1	7.3	HV
Tokusnima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	*****	7.3	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
** **	20	The state of the s	10/2 - 10/3	10	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	12	MV
	20	Ti. D. 0 . 10	10/5 10/0	4.5	****
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	4.5	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	18	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	10	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	4.8	HV
		Environmental Science (Udo City)	9/25 - 9/26		
		, , , , , ,	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	2.4	MV
		Environment (Miyazaki City)			
		` ' '			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	5.7	HV
		and Public Health (Kagoshima City)	10/29 - 10/30	,	-11 7
		The second of th	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	0.69	HV
Okiliawa Fiel.	30	Cape fiedo (Kuingaini vinage)	9/24 - 9/23	0.09	11 V
			9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

# The Environment Monitoring 2019

## [20-4] Tetrachlorinated naphthalenes/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.04 Quantification limit: 0.11

	Aggregated value
Geometric mean	6.5
Median	7.7
Maximum	28
Minimum	0.40

Local communities	No.	Monitored sites	Warm Sampling dates	Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	1.8	MV
Hokkuido	1	Ramikawa General Suspireteetalah Bareaa (Msamkawa City)	10/11 10/10	1.0	141 4
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.64	HV
Баррого Сту	2	Sapporo Art I ark (Sapporo City)	10/8 - 10/9	0.04	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	3.2	HV
Twate Tiel.	3	Sugo Tin Quanty Monitoring Station (Tukizawa City)	10/1 - 10/2	3.2	11 '
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	5.2	MV
, 6		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	4.9	MV
-		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	10	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	7.4	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	20	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	7.1	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	13	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	28	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	5.3	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	8.0	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	1.6	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	16	HV
		Environment (Kofu City)	10/29 - 10/30		
Name - D. C	17	No como Environmental Composition D. 1.1. Com	10/30 - 10/31	( 5	3.437
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	6.5	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	7.1	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30 10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	15	MV
Min Deed	10	Mis Dockstrus Hoolsh and Environment Document In 1991	0/20 10/1	4.2	1137
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	4.2	HV
		(Yokkaichi City)	10/1 - 10/2 10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3	13	HV
Osaka PTCI.	∠0			13	17 V
		Annex (Osaka City)	10/6 - 10/7	l l	

Local communities	No.	Monitored sites		season	Air sampler
Local communities			Sampling dates	Measured value	All sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	4.6	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	6.5	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	15	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.93	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	16	HV
			9/29 - 9/30		
	L		9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	19	MV
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	11	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	12	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	13	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	9.2	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	20	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	9.9	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	5.5	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	1.5	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	10	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	0.40	HV
			9/25 - 9/26		
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

# The Environment Monitoring 2019

## [20-5] Pentachlorinated naphthalenes/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.03 Quantification limit: 0.08

	Aggregated value
Geometric mean	1.0
Median	1.3
Maximum	5.7
Minimum	tr(0.05)

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	0.36	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.08	HV
			10/8 - 10/9 10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	0.50	HV
Twate Tiel.		Sugo Air Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	0.50	11 v
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	0.97	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	0.50	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	0.90	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	0.99	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	2.8	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	0.21	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26 9/26 - 9/27	2.9	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	2.9	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	1.8	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	1.2	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	0.23	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	2.3	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	1.2	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	1.2	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	5.7	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	0.76	HV
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7 10/7 - 10/8	2.4	HV

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.77	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	1.6	HV
			10/8 - 10/9		
			10/9 - 10/10	1	
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	1.7	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	0.14	HV
		, ,	10/29 - 10/30		
			10/30 - 10/31	1	
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	3.1	HV
		,y ( (	9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	1.6	MV
i amagacini i ici.	20	Environment (Yamaguchi City)	7/27 - 10/1	1.0	141 4
		Environment (Tuningueni City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	1.3	MV
	21	Tragi freatti and werrare Center (fragi City)	9/24 - 10/1	1.3	IVI V
Tokushima Pref.	28	Talayahina Duafaatiyaal Dublia Haalth Dhammaaaytiaal and	9/30 - 10/1	4.4	HV
Tokusnima Prei.	28	Tokushima Prefectural Public Health, Pharmaceutical and	*****	4.4	нv
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2	ļ	
**	20	The state of the s	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	1.8	MV
	20	71: P. 0 1 G	10/5 10/0		****
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	2.3	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	4.7	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	2.0	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	1.1	HV
		Environmental Science (Udo City)	9/25 - 9/26	]	
			9/26 - 9/27	1	
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	0.19	MV
•		Environment (Miyazaki City)			
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	1.7	HV
		and Public Health (Kagoshima City)	10/29 - 10/30	1	11.
		The second of th	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	tr(0.05)	HV
OKIIIAWA FICI.	30	Cape Head (Kumgami v mage)	9/24 - 9/23	и(0.03)	11 V
			9/26 - 9/27		

⁽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) 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] Hexachlorinated naphthalenes/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 33/36 (Missing value : 0) Detection Frequency (sample): 33/36 (Missing value: 0)

Detection limit: 0.03 Quantification limit: 0.07

	Aggregated value
Geometric mean	0.13
Median	0.16
Maximum	1.1
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	0.10	MV
	_				
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
Sapporo City		Sapporo Art Park (Sapporo City)	10/8 - 10/8	na	п v
			10/8 - 10/9		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	tr(0.06)	HV
Twate I Ici.	3	Sugo Ali Quality Mollitoring Station (Takizawa City)	10/1 - 10/2	u(0.00)	11 V
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	0.10	MV
mijugi i ici.		(Sendai City)	10/1 10/11	0.10	111 1
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	0.11	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	0.22	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	0.18	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	0.31	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	0.28	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.25	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	0.17	HV
1 11 gava 1 1 0 11		Symmetric Quanty mannering summer (1 mgum eny)	10/8 - 10/9	0.17	
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	0.20	HV
•			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	tr(0.03)	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	0.21	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	0.20	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	0.17	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
	L		10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	1.1	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	0.09	HV
IVIIC I ICI.	1)	(Yokkaichi City)	10/1 - 10/2	0.07	11 V
		(Tokkatolii Oity)	10/1 - 10/2		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/5	0.19	HV
	20	Annex (Osaka City)	10/6 - 10/7	3.17	11.7
		(	10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	0.07	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	0.15	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	0.12	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(0.04)	HV
		,	10/29 - 10/30	ì í	
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	0.25	HV
,		, , ,	9/29 - 9/30	1	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	0.11	MV
I minguom I ioi.	20	Environment (Yamaguchi City)	2,21 10,1	0.11	111 1
		(			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	0.11	MV
	21	riagi ricatti and wenate center (riagi etty)	)/2 <del>4</del> - 10/1	0.11	IVI V
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	0.53	HV
TOKUSIIIII TICI.	20	Environmental Sciences Center (Tokushima City)	10/1 - 10/2	0.55	11 V
		Environmental Sciences Center (Tokushina City)			
IZ D C	20	W D C + 1D 11' C : D 1/T 1 + C'+	10/2 - 10/3	0.22	3.637
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	0.23	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	0.16	HV
Enime Prei.	30		10/7 - 10/8	0.16	нv
		(Uwajima City)			
F 1 1 D C	2.1	0 + 6' - 6 + 11' - (0 + 6' - )	10/9 - 10/10	0.62	1117
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.62	HV
			9/25 - 9/26		
a	2.5		9/26 - 9/27	0.00	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.20	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	0.14	HV
		Environmental Science (Udo City)	9/25 - 9/26	]	
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(0.04)	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	0.15	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31	]	
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26	]	
			9/26 - 9/27	j l	

Detection frequency (sample) is based on the number of samples, 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.

# The Environment Monitoring 2019

## [20-7] Heptachlorinated naphthalenes/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 22/36 (Missing value : 0) Detection Frequency (sample): 22/36 (Missing value: 0)

Detection limit: 0.02 Quantification limit: 0.04

	Aggregated value
Geometric mean	nd
Median	tr(0.02)
Maximum	0.08
Minimum	nd

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	•
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	tr(0.03)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8 10/8 - 10/9	nd	HV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	10/9 - 10/10 9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	tr(0.02)	HV
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	nd	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	0.07	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	0.06	MV
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	0.05	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	0.04	MV
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25 9/25 - 9/26 9/26 - 9/27	tr(0.03)	HV
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	0.04	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8 10/8 - 10/9 10/9 - 10/10	nd	HV
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	tr(0.03)	HV
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and Environmental Science (Kanazawa City)	10/15 - 10/16 10/16 - 10/17 10/17 - 10/18	nd	HV
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and Environment (Kofu City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	tr(0.02)	HV
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	tr(0.03)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and Environmental Sciences (Kakamigahara City)	10/28 - 10/29 10/29 - 10/30 10/30 - 10/31	tr(0.02)	HV
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	0.04	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute (Yokkaichi City)	9/30 - 10/1 10/1 - 10/2 10/2 - 10/3	nd	HV
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7 10/7 - 10/8	nd	HV

Local communities	No.	Monitored sites	Warm season		Air sampler
	INO.		Sampling dates	Measured value	An sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	nd	HV
Hooe eng		resolve institute of freutin (resolve City)	10/8 - 10/9	ina i	11 '
			10/9 - 10/10		
N. D. C	22	T : A: O 1': M :: C(a): (T : C(a))		4 (0.02)	1117
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(0.02)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(0.02)	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.02)	HV
,		, , , , , , , , , , , , , , , , , , , ,	9/29 - 9/30	1 ` ' / L	
			9/30 - 10/1	1	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
i amaguem Pref.	∠0		7/44 - 10/1	nu	1V1 V
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	tr(0.02)	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2	ì í	
		, , , , , , , , , , , , , , , , , , , ,	10/2 - 10/3	1	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(0.02)	MV
Ruguwa 1 Ici.	2)	Ragawa Percetara Paone Swimming Poor (Pakamatsa City)	10/23 10/20	11(0.02)	141 4
Ehime Pref.	20	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	1	HV
Enime Prei.	30	, ,		nd	нv
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	0.08	HV
			9/25 - 9/26		
			9/26 - 9/27	1	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(0.02)	MV
C				, ,	
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(0.02)	HV
Kumamoto 1 ici.	33		9/25 - 9/26	u(0.02)	11 V
		Environmental Science (Udo City)	********************************		
1: D 0			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(0.02)	HV
-		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31	1	
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
Okillawa 1 ICI.	30	Cape Hedo (Kaniganii vinage)	9/25 - 9/26	iiu	11 V
				1	
	1		9/26 - 9/27		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

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

## [20-8] Octachlorinated naphthalene/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 12/36 (Missing value : 0) Detection Frequency (sample): 12/36 (Missing value: 0)

Detection limit: 0.02 Quantification limit: 0.05

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.14
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Hokkaido	1	Kainikawa General Suoprefectural Bureau (Asanikawa City)	10/11 - 10/16	na	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
Sapporo City		Sapporo Art Park (Sapporo City)	10/8 - 10/9	na	п٧
			10/8 - 10/9		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
Iwate Fiel.	3	Sugo Ali Quanty Monitoring Station (Takizawa City)	10/1 - 10/2	IId	11 V
			10/1 - 10/2		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	nd	MV
wiiyagi i ici.	,	(Sendai City)	10/4 10/11	nd	141 4
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	0.14	MV
I umuguw I IVI		City)	<i>7,</i> <b>2</b>	0.11	212 1
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	tr(0.02)	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	tr(0.03)	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	tr(0.03)	MV
·		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	tr(0.03)	MV
		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	tr(0.03)	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	nd	HV
		Environment (Kofu City)	10/29 - 10/30		
·	4.5	N 7 10 10 10 10 10 10 10 10 10 10 10 10 10	10/30 - 10/31	(0.00	
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	tr(0.04)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	nd	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30	·	
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	nd	MV
Mi - D C	10	Mis Drofostyns Hoolsh and Franciscon P. L. L. C.	0/20 10/1	L	1117
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1 10/1 - 10/2	nd	HV
		(Yokkaichi City)			
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3 10/5 - 10/6	nd	HV
Osaka Prei.	20	Annex (Osaka City)	10/6 - 10/7	nu	пν
		AIIIICA (Osaka City)	10/6 - 10/7		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	nd	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(0.04)	HV
		,	10/29 - 10/30	, í	
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.02)	HV
,			9/29 - 9/30	(* * )	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
i amagacini i ici.	20	Environment (Yamaguchi City)	7/27 - 10/1	iid	1V1 V
		Environment (Tamagaem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
	21	hagi health and wehare center (hagi city)	9/24 - 10/1	na	IVI V
T 1 1' D C	20	T 1 1' D C ( 1D 11' II 14 D) (' 1 1	0/20 10/1	1	1117
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	nd	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	nd	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	tr(0.03)	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	nd	MV
· ·					
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	nd	HV
-		Environmental Science (Udo City)	9/25 - 9/26		
		[	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(0.02)	MV
,		Environment (Miyazaki City)	11.0 11/12	(0.02)	-11. 1
		Ziii ii iii juzulii City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	nd	HV
Kagosiiiiia Fiel.	رر	and Public Health (Kagoshima City)	10/28 - 10/29	nu	ΠV
		and I done Health (Nagoshillia City)			
01: 20.0	2.	C H 1 (V : 'V'II )	10/30 - 10/31	. (0.02)	777.7
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	tr(0.02)	HV
			9/25 - 9/26		
			9/26 - 9/27		

Detection frequency (sample) is based on the number of samples, 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.

## [21] Hexachlorobuta-1,3-diene/air (pg/m³)

Monitored year: 2019

Detection Frequency (site): 35/36 (Missing value: 0) Detection Frequency (sample): 104/108 (Missing value: 0)

Detection limit : 20 Quantification limit : 50

	Aggregated value
Geometric mean	1,500
Median	2,600
Maximum	5,800
Minimum	nd

Local communities	No.	Monitored sites	Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/15 - 10/16	2,300	LV
Hokkaldo	1	Kannkawa General Suoprefectural Bureau (Asanikawa City)	10/16 - 10/17	2,600	LV
			10/17 - 10/18	2,300	
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/18	2,500	LV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	2,900	LV
				2,400	
It- Df	3	Sugo Air Quality Monitoring Station (Takizawa City)	10/9 - 10/10 9/30 - 10/1		LV
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	10/1 - 10/2	3,000	LV
			10/1 - 10/2	180 60	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/2 - 10/3	tr(20)	LV
Milyagi Prei.	4	(Sendai City)			LV
		(Sendar City)	10/8 - 10/9	tr(20)	
37 4 D C	-	W . I C . CE IC . Of	10/9 - 10/10	tr(20)	T 3.7
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 9/25	2,500	LV
		City)	9/25 - 9/26	2,400	
H 1:D C		The state of the s	9/26 - 9/27	2,400	* * * * * * * * * * * * * * * * * * * *
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/29 - 10/30	tr(30)	LV
		City)	10/30 - 10/31	tr(40)	
			10/31 - 11/1	60	
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/30 - 10/31	3,200	LV
		City)	10/31 - 11/1	3,700	
			11/1 - 11/2	4,100	
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/28 - 10/29	2,700	LV
		Protection (Koto Ward)	10/29 - 10/30	2,900	
			10/30 - 10/31	3,800	
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/4	2,800	LV
			10/4 - 10/5	2,500	
			10/5 - 10/6	2,500	
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	2,500	LV
8		, , , ,	9/25 - 9/26	2,700	
			9/26 - 9/27	2,700	
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 10/30	240	LV
Ž		(Yokohama City)	10/30 - 10/31	3,600	
		•	10/31 - 11/1	4,100	
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	3,300	LV
1 (11 gava 1 1 0 1)		oyumu iin Quanty Memoring Sunton (Migum Suy)	10/8 - 10/9	3,400	2.
			10/9 - 10/10	2,500	
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	2,400	LV
Toyama Tier.	13	Tonami 7th Quanty Mointoring Station (Tonami City)	10/16 - 10/17	2,300	L·
			10/17 - 10/18	2,300	
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/17 - 10/16	2,400	LV
Ishikawa 1 ICI.	14	Environmental Science (Kanazawa City)	10/16 - 10/17	2,400	LV
		Environmental Science (Kanazawa City)	10/17 - 10/18	2,400	
Yamanashi Pref.	1.5	Yamanashi Prefectural Institute of Public Health and			T 37
i amanasni Prei.	15		10/28 - 10/29	3,600	LV
		Environment (Kofu City)	10/29 - 10/30	3,400	
N P. C	1.0	Name Fording words I Company (C. P. 11 CC)	10/30 - 10/31	3,700	7 7 7
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/28 - 10/29	3,100	LV
		(Nagano City)	10/29 - 10/30	3,400	
G:0 T 2			10/30 - 10/31	5,100	
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	3,200	LV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30	3,400	
			10/30 - 10/31	5,800	
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 9/25	nd	LV
			9/25 - 9/26	2,600	
			9/26 - 9/27	2,800	
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	2,600	LV
		(Yokkaichi City)	10/1 - 10/2	2,800	
	L		10/2 - 10/3	2,900	
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/15 - 10/16	2,700	LV
		Annex (Osaka City)	10/16 - 10/17	2,500	
	1		10/17 - 10/18	2,700	

Local communities	No.	Monitored sites	Warm	season	Air sampler
Local communities	INU.		Sampling dates	Measured value	An sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	2,600	LV
			10/16 - 10/17	2,500	
			10/17 - 10/18	2,700	
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	3,900	LV
•		` •	10/8 - 10/9	4,200	
			10/9 - 10/10	2,600	
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	2,200	LV
			11/6 - 11/7	2,200	
			11/7 - 11/8	2,600	
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	2,900	LV
		, , , , , , , , , , , , , , , , , , ,	10/29 - 10/30	5,200	
			10/30 - 10/31	3,600	
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	3,100	LV
,		, , , , , , , , , , , , , , , , , , , ,	9/29 - 9/30	4,000	
			9/30 - 10/1	4,600	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 9/25	2,500	LV
1 umagarin 1 1011		Environment (Yamaguchi City)	9/25 - 9/26	2,400	2.
		Zinvinoimioni (1 miniguom enj)	9/26 - 9/27	2,700	
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 9/25	2,300	LV
	27	Tragi freath and wenare center (fragi city)	9/25 - 9/26	2,300	_ ·
			9/26 - 9/27	2,600	
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	2,600	LV
Tokusiiiiia Tici.	20	Environmental Sciences Center (Tokushima City)	10/1 - 10/2	2,500	
		Environmental Sciences Center (Tokushima City)	10/2 - 10/3	2,900	
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/26	2,700	LV
Kagawa Fici.	29	Ragawa Frefectural Fublic Swiffinning Foot (Takamatsu City)	10/26 - 10/27	3,800	LV
			10/26 - 10/27	4,200	
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/27 - 10/28	4,700	LV
Emme Prei.	30		10/8 - 10/9	4,700	LV
		(Uwajima City)	10/8 - 10/9		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	3,800 tr(40)	LV
rukuoka Piei.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25		LV
				50	
C D C	22		9/26 - 9/27	60	T 37
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 9/25	2,400	LV
			9/25 - 9/26	2,400	
**	2.2	77	9/26 - 9/27	2,600	
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	2,600	LV
		Environmental Science (Udo City)	9/25 - 9/26	2,500	
			9/26 - 9/27	2,800	
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/6	nd	LV
		Environment (Miyazaki City)	11/6 - 11/7	nd	
			11/7 - 11/8	nd	
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	3,000	LV
		and Public Health (Kagoshima City)	10/29 - 10/30	3,800	
			10/30 - 10/31	3,600	
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	2,700	LV
			9/25 - 9/26	2,700	
			9/26 - 9/27	2,400	

⁽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 5) nd: Not detected

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

⁽Note 3) LV: Low volume air sampler.

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

#### [22] Pentachlorophenol and its salts and esters/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: *0.3 Quantification limit: *0.9

	Aggregated value
Geometric mean	34
Median	37
Maximum	200
Minimum	4.9

Local communities	No.	Monitored sites		season Measured value	Air sampler
TT 11 '1	1	W 1 C 101 C 1D (A 11 C)	Sampling dates		) (T)
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	16	MV
g G'		G 4 . P. 1 (G G')	10/7 10/0	0.1	117.7
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	9.1	HV
			10/8 - 10/9		
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	37	HV
			10/1 - 10/2		
			10/2 - 10/3	2.1	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	31	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	29	MV
•		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	46	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	67	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	110	MV
y - ******		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	10	MV
		,(-8		- "	
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	200	HV
8			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	110	MV
		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	42	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	55	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	12	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	71	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	34	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	20	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	40	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	25	HV
iviie Prei.	19		9/30 - 10/1 10/1 - 10/2	23	нV
		(Yokkaichi City)			
Ocalra Prof	20	Ocalca Joint Desfactural Covernment Dividing Dividing 2	10/2 - 10/3	33	HV
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7	33	нv
	l	Annea (Osaka City)	10/6 - 10/7		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	22	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	47	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	27	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	6.8	HV
Similare 1 fer.	27	Oki i vational relativation observatory (Okinosimina Town)	10/29 - 10/30	0.0	11 4
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	35	HV
Tillosiiilia City	23	Throshinia City Kokutaiji Junioi Tilgii School (Tiroshinia City)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	33	11 V
			9/29 - 9/30		
** *** *	-		9/30 - 10/1	1.10	
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	9/24 - 10/1	140	MV
		Environment (Tamaguem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	86	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	56	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	38	MV
8					
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	88	HV
2		(Uwajima City)	10/8 - 10/9		
		(o wajima city)	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	45	HV
rukuoka 11ci.	31	Official City Government Building (Official City)	9/25 - 9/26	43	11 V
a D 2			9/26 - 9/27	26	
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	36	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	32	HV
Kumamoto Pref.	33		9/24 - 9/25	32	пν
		Environmental Science (Udo City)	*************		
) ( 1:5 °	2.1	1. 1. D. C 11	9/26 - 9/27	4.0	
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	4.9	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	48	HV
-		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	7.5	HV
OKIIIawa I ICI.	50	Cape 11000 (Rumgum + mage)	9/25 - 9/26	1.5	11 V
	l				
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler, MV: Medium volume air sampler.

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

# [22-1] Pentachlorophenol/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.2 Quantification limit: 0.6

	Aggregated value
Geometric mean	4.1
Median	4.2
Maximum	22
Minimum	0.6

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	-
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	2.9	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	0.8	HV
Баррого Спу		Sapporo Art I ark (Sapporo City)	10/8 - 10/9	0.8	11 V
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	3.6	HV
Twate Tiel.		Sugo in Quanty Monitoring Station (Tukizawa City)	10/1 - 10/2	3.0	11 '
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	2.7	MV
, 8		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	2.7	MV
-		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	4.1	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	5.3	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	13	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	1.2	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	19	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	9.0	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	3.1	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	8.9	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	1.6	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
37 1:D 0	1.7	Y 1'D C 11 C 1 CD 11 Y 11 1	10/17 - 10/18	1.1	****
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	11	HV
		Environment (Kofu City)	10/29 - 10/30		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/30 - 10/31 10/24 - 10/31	6.5	MV
ragano i ici.	10	(Nagano City)	10/27 - 10/31	0.5	1V1 V
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	2.5	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	5.9	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	2.7	HV
19110 1 101.	17	(Yokkaichi City)	10/1 - 10/2	2.1	11 V
		(Tokkatolii Oity)	10/1 - 10/2		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/2 - 10/3	9.3	HV
		Annex (Osaka City)	10/6 - 10/7		11.
			10/7 - 10/8		

Hyogo Pref.   21   Hyogo Prefectural Environmental Research Center (Kobe City)   10/15 - 10/16   10/16   10/17   10/18	Local communities	No.	Monitored sites	Warm	season	Air sampler
10/16 - 10/17   10/18	Local communities	NO.	Wonitored sites	Sampling dates	Measured value	Air sampier
Mora Pref.   22   Kobe Institute of Health (Kobe City)   1077 - 108   1098 - 109   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1099 - 1010   1	Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	2.5	HV
Robe City   22   Robe Institute of Health (Kobe City)   107 - 108   108 - 109   109 - 10/10   109 - 10/10   109 - 10/10   109 - 10/10   11/5 - 11/6   2.3   HV   11/5 - 11/6   11/6 - 11/7   11/7 - 11/8   11/6 - 11/7   11/7 - 11/8   11/6 - 11/7   11/7 - 11/8   11/6 - 11/7   11/7 - 11/8   11/6 - 11/7   11/7 - 11/8   11/7 - 11/8   11/6 - 11/7   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 - 11/8   11/7 -				10/16 - 10/17		
Nara Pref.   23   Tenri Air Quality Monitoring Station (Tenri City)   11/5 - 11/6   2.3   HV				10/17 - 10/18	1	
Nara Pref.   23   Tenri Air Quality Monitoring Station (Tenri City)   11/5 - 11/6   2.3   HV	Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	5.9	HV
Nara Pref.   23   Tenri Air Quality Monitoring Station (Tenri City)   11/5 - 11/6   2.3   HV	Ť		` */	10/8 - 10/9		
Nara Pref.   23   Tenri Air Quality Monitoring Station (Tenri City)						
Shimane Pref.   24   Oki National Acid Rain Observatory (Okinoshima Town)   10/28 - 10/29   0.8   HV   10/28 - 10/29   0.8   HV   10/28 - 10/30   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10/31   10/30 - 10	Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)		2.3	HV
Shimane Pref.   24   Oki National Acid Rain Observatory (Okinoshima Town)   10/28   10/29   10/30   10/31   10/29   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/31   10/30   10/30   10/31   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30   10/30			( ()			
Shimane Pref.   24   Oki National Acid Rain Observatory (Okinoshima Town)   10/28 + 10/29   10/29 - 10/30   10/29 - 10/30   10/29 - 10/30   10/29 - 10/30   10/29 - 10/30   10/29   10/29 - 10/30   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29   10/29						
Hiroshima City   25	Shimane Pref	24	Oki National Acid Rain Observatory (Okinoshima Town)		0.8	HV
Hiroshima City   25   Hiroshima City Kokutaiji Junior High School (Hiroshima City   9/28 - 9/29   4.2   HV   9/28 - 9/30   9/30 - 10/1   9/30 - 10/1   18   MV	Similane 1 ici.	27	Oki i vational 7 teld Rain Observatory (Okinosinina Town)		0.0	11 4
Hiroshima City   25					1	
Yamaguchi Pref.   26   Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)   9/24 - 10/1   18   MV	Hirochima City	25	Hiroshima City Kokutajii Juniar High School (Hiroshima City)		4.2	ш
Yamaguchi Pref.   26   Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)   9/24 - 10/1   18   MV	Tillosiiilia City	23	Throshina City Kokutaiji Junioi Tiigii School (Tiiroshinia City)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	4.2	11 V
Yamaguchi Pref.         26         Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)         9/24 - 10/1         22         MV           27         Hagi Health and Welfare Center (Hagi City)         9/24 - 10/1         18         MV           Tokushima Pref.         28         Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)         10/1 - 10/2 - 10/3         7.4         HV           Kagawa Pref.         29         Kagawa Prefectural Public Swimming Pool (Takamatsu City)         10/2 - 10/3         3.7         MV           Ehime Pref.         30         Ehime Prefectural Government Nanyo Regional Office (Uwajima City)         10/7 - 10/8 11         HV         HV           Fukuoka Pref.         31         Omuta City Government Building (Omuta City)         9/24 - 9/25 9/25 9/26 9/27         5.4         HV           Saga Pref.         32         Saga Prefectural Environmental Research Center (Saga City)         9/24 - 9/25 9/26 9/27 9/26 9/26 9/27         5.9         HV           Kumamoto Pref.         34         Kumamoto Prefectural Institute of Public Health and Environmental Research (Institute for Public Health and Environment (Miyazaki Prefectural Institute for Environmental Research 10/28 - 10/29 9/26 9/27         3.2         HV           Kagoshima Pref.         35         Kagoshima Prefectural Institute for Environmental Research 10/28 - 10/2				********************************	1	
Environment (Yamaguchi City)   27   Hagi Health and Welfare Center (Hagi City)   9/24 - 10/1   18   MV	V	26	Vancanali Barfartani Instituta of Baldia II-ald		22	MX
Tokushima Pref.   28   Tokushima Prefectural Public Health, Pharmaceutical and Environmental Sciences Center (Tokushima City)   10/1 - 10/2   10/2 - 10/3   10/2 - 10/3   10/2 - 10/3   10/2 - 10/3   10/2 - 10/3   10/2 - 10/3   10/2 - 10/3   10/2 - 10/3   3.7   MV	Yamaguchi Prei.	26		9/24 - 10/1	22	MV
Environmental Sciences Center (Tokushima City)   10/1 - 10/2   10/2 - 10/3     10/2 - 10/3     10/2 - 10/3     10/2 - 10/3     10/2 - 10/2     10/2 - 10/2     10/2 - 10/2     3.7   MV		27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	18	MV
Ragawa Pref.   29   Kagawa Prefectural Public Swimming Pool (Takamatsu City)   10/25 - 10/28   3.7   MV	Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	7.4	HV
Ragawa Pref.   29   Kagawa Prefectural Public Swimming Pool (Takamatsu City)   10/25 - 10/28   3.7   MV			Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
Ehime Pref.   29   Kagawa Prefectural Public Swimming Pool (Takamatsu City)   10/25 - 10/28   3.7   MV			<b>\</b>			
Cuwajima City   10/8 - 10/9   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9   10/9   10/9   10/9   10/9   10/9   10/9   10/9   10/9   10/9   10/	Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	3.7	MV
Cuwajima City   10/8 - 10/9   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/10   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9 - 10/9   10/9   10/9   10/9   10/9   10/9   10/9   10/9   10/9   10/9   10/9   10/	Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	11	HV
Tukuoka Pref.   31   Omuta City Government Building (Omuta City)   9/24 - 9/25   5.4   HV				10/8 - 10/9	1	
Saga Pref. 32 Saga Prefectural Environmental Research Center (Saga City) 9/24 - 10/1 4.9 MV  Kumamoto Pref. 33 Kumamoto Prefectural Institute of Public Health and Environmental Science (Udo City) 9/25 - 9/26 9/26 - 9/27  Miyazaki Pref. 34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City) 11/5 - 11/12 0.6 MV  Kagoshima Pref. 35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City) 10/29 - 10/30 10/30 - 10/31  Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 9/25 - 9/26				10/9 - 10/10		
Saga Pref. 32 Saga Prefectural Environmental Research Center (Saga City) 9/24 - 10/1 4.9 MV  Kumamoto Pref. 33 Kumamoto Prefectural Institute of Public Health and Environmental Science (Udo City) 9/25 - 9/26 9/26 - 9/27  Miyazaki Pref. 34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City) 11/5 - 11/12 0.6 MV  Kagoshima Pref. 35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City) 10/29 - 10/30 10/30 - 10/31  Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 9/25 - 9/26	Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	5.4	HV
Saga Pref. 32 Saga Prefectural Environmental Research Center (Saga City) 9/24 - 10/1 4.9 MV  Kumamoto Pref. 33 Kumamoto Prefectural Institute of Public Health and Environmental Science (Udo City) 9/25 - 9/26 9/26 - 9/27  Miyazaki Pref. 34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City) 11/5 - 11/12 0.6 MV  Kagoshima Pref. 35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City) 10/29 - 10/30 10/30 - 10/31  Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 9/25 - 9/26			3 ( 3,	9/25 - 9/26		
Saga Pref. 32 Saga Prefectural Environmental Research Center (Saga City) 9/24 - 10/1 4.9 MV  Kumamoto Pref. 33 Kumamoto Prefectural Institute of Public Health and Environmental Science (Udo City) 9/25 - 9/26 9/26 - 9/27  Miyazaki Pref. 34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City) 11/5 - 11/12 0.6 MV  Kagoshima Pref. 35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City) 10/29 - 10/30 10/30 - 10/31  Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 9/25 - 9/26				9/26 - 9/27	1	
Environmental Science (Udo City)  9/25 - 9/26 9/26 - 9/27  Miyazaki Pref.  34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)  Kagoshima Pref.  35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City)  Okinawa Pref.  36 Cape Hedo (Kunigami Village)  9/24 - 9/25 9/25 - 9/26	Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)		4.9	MV
Environmental Science (Udo City)  9/25 - 9/26 9/26 - 9/27  Miyazaki Pref.  34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City)  Kagoshima Pref.  35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City)  Okinawa Pref.  36 Cape Hedo (Kunigami Village)  9/24 - 9/25 9/25 - 9/26	Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	5.9	HV
Miyazaki Pref. 34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City) 11/5 - 11/12 0.6 MV  Kagoshima Pref. 35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City) 10/29 - 10/30 10/30 - 10/31  Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 9/25 - 9/26					1	
Miyazaki Pref. 34 Miyazaki Prefectural Institute for Public Healthand Environment (Miyazaki City) 11/5 - 11/12 0.6 MV  Kagoshima Pref. 35 Kagoshima Prefectural Institute for Environmental Research and Public Health (Kagoshima City) 10/29 - 10/30 10/30 - 10/31  Okinawa Pref. 36 Cape Hedo (Kunigami Village) 9/24 - 9/25 9/25 - 9/26				******		
Environment (Miyazaki City)	Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand		0.6	MV
and Public Health (Kagoshima City)  10/29 - 10/30 10/30 - 10/31  Okinawa Pref. 36 Cape Hedo (Kunigami Village)  9/24 - 9/25 9/25 - 9/26	<i>azam</i> 1131.		· ·	-1.0 11.12		
and Public Health (Kagoshima City)  10/29 - 10/30 10/30 - 10/31  Okinawa Pref. 36 Cape Hedo (Kunigami Village)  9/24 - 9/25 9/25 - 9/26	Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	3.2	HV
10/30 - 10/31     Okinawa Pref.   36   Cape Hedo (Kunigami Village)   9/24 - 9/25   0.7   HV     9/25 - 9/26	<i>5</i>		•			
Okinawa Pref.     36     Cape Hedo (Kunigami Village)     9/24 - 9/25     0.7     HV       9/25 - 9/26			(**************************			
9/25 - 9/26	Okinawa Pref	36	Cane Hedo (Kunigami Village)		0.7	HV
	OKIIIawa I ICI.	30	Cape 11000 (Kumgami v mage)		0.7	11 V

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

Detection frequency (sample) is based on the number of samples, 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.

# [22-2] Pentachloroanisole/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 0.1 Quantification limit: 0.3

	Aggregated value
Geometric mean	30
Median	32
Maximum	180
Minimum	4.3

Local communities	No.	Monitored sites		season Measured value	Air sampler
TT 11 '1	1	W 1 C 101 C 1D (A 11 C)	Sampling dates		) (T)
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	13	MV
g		D 1 (0 C)	10/5 10/0		****
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	8.3	HV
			10/8 - 10/9		
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	33	HV
			10/1 - 10/2		
			10/2 - 10/3	20	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	28	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	26	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	42	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	62	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	100	MV
-		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	9.2	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	180	HV
Č			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	99	MV
·		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	39	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	46	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	10	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	60	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	28	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	18	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	34	MV
M. D. C	10	Mr. D. C. e. H. Id. and a construction of the	0/20 10/1	22	****
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	22	HV
		(Yokkaichi City)	10/1 - 10/2		
Ocalra De-f	20	Ocalca Joint Desfactural Covernment Divilding Desiding 2	10/2 - 10/3	24	1117
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	24	HV
	1	Annex (Osaka City)	10/6 - 10/7 10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
Local communities			Sampling dates	Measured value	All sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	20	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	41	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	25	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	6.0	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	31	HV
			9/29 - 9/30		
	L		9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	120	MV
		Environment (Yamaguchi City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	68	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	49	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	34	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	77	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	40	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	31	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	26	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	4.3	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	45	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	6.8	HV
			9/25 - 9/26		
	l		9/26 - 9/27		

⁽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) HV: High volume air sampler , MV: Medium volume air sampler.

#### [23] Short-chain chlorinated paraffins/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 32/36 (Missing value : 0) Detection Frequency (sample): 32/36 (Missing value: 0)

Detection limit: *400 Quantification limit: *1,100

	Aggregated value
Geometric mean	tr(1,000)
Median	1,100
Maximum	5,000
Minimum	nd

Local communities	No.	Monitored sites		Magazina di vialina	Air sampler
			Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	tr(400)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
11 7			10/8 - 10/9		
T . D C	2		10/9 - 10/10	1.700	****
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1 10/1 - 10/2	1,700	HV
			10/1 - 10/2		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	tr(1,000)	MV
1111) wg. 1 1011		(Sendai City)	10/11	11(1,000)	112 1
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	tr(600)	MV
Tumagata TTCI.		City)	J/24 10/1	11(000)	141 4
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	tr(700)	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	tr(600)	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	3,400	MV
-		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	1,100	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	3,000	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	2,800	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	tr(500)	HV
-			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/17 - 10/18 10/15 - 10/16	nd	HV
Ishikawa Prei.	14	Environmental Science (Kanazawa City)	10/16 - 10/17	na	п٧
		Environmental Science (Kanazawa City)	10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	tr(900)	HV
		Environment (Kofu City)	10/29 - 10/30	(4 * * *)	
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	tr(500)	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	1,900	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
N 60	10	CIT WILL BLOW CO	10/30 - 10/31	1200	
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	4,200	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	tr(900)	HV
		(Yokkaichi City)	10/1 - 10/2	` ´	
			10/2 - 10/3		
0 1 7 0	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	1,600	HV
Osaka Pref.	20	Annex (Osaka City)	10/6 - 10/7	-,	

Local communities	No.	Monitored sites		season	Air sampler
	110.		Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	tr(700)	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	2,600	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	1,300	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(500)	HV
		,	10/29 - 10/30	` ´	
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	1,100	HV
,			9/29 - 9/30	-,	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	5,000	MV
i amaguem i ici.	20	Environment (Yamaguchi City)	9/24 - 10/1	3,000	IVI V
		Environment (Tamaguem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	1,400	MV
	21	hagi health and wehare center (hagi city)	9/24 - 10/1	1,400	IVI V
T 1 1' D C	20	T 1 1' D C ( 1D 11' II 1/1 D1 ( ' 1 1	0/20 10/1	2 200	1117
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	2,300	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(700)	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	1,700	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	1,300	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(1,000)	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	1,500	HV
		Environmental Science (Udo City)	9/25 - 9/26		
			9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(800)	MV
		Environment (Miyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	1,300	HV
12mg0011111111 1 101.		and Public Health (Kagoshima City)	10/29 - 10/30	1,500	11 1
		una i uone ileutti (ixagosiiina Oity)	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
Okinawa Piel.	30	Cape riedo (Kuniganii vinage)		na	п۷
			9/25 - 9/26		
			9/26 - 9/27		

(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.

 $⁽Note\ 3)\ HV\colon High\ volume\ air\ sampler\ ,\ MV\colon Medium\ volume\ air\ sampler.$ 

⁽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 congeners.

# [23-1] Chlorinated decanes/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 100 Quantification limit: 400

	Aggregated value
Geometric mean	400
Median	400
Maximum	1,500
Minimum	tr(100)

Local communities	No.	Monitored sites		season Measured value	Air sampler
TT-1414-	1	Variable Consul Salar fortunal Decree (April Bosses City)	Sampling dates		MXZ
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	tr(100)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	tr(100)	HV
11 2			10/8 - 10/9		
T . D 0	_		10/9 - 10/10	600	****
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	600	HV
			10/1 - 10/2		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/2 - 10/3 10/4 - 10/11	400	MV
Milyagi Fiel.	4	(Sendai City)	10/4 - 10/11	400	IVI V
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama City)	9/24 - 10/1	tr(300)	MV
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	tr(300)	MV
10414111 11011	Ü	City)	10,20 11,1	4(500)	
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	tr(300)	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	1,500	MV
-		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	tr(300)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	900	HV
			9/25 - 9/26		
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	1,200	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	tr(200)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	tr(100)	HV
			10/16 - 10/17		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/17 - 10/18	tr(100)	HV
isiiikawa Prei.	14	Environmental Science (Kanazawa City)	10/15 - 10/16 10/16 - 10/17	tr(100)	нv
		Environmental Science (Kaliazawa City)	10/16 - 10/17		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	400	HV
- 3111111111111111111111111111111111111	1.0	Environment (Kofu City)	10/29 - 10/30		
		, , , , , ,	10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	tr(200)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	500	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30 10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	10/30 - 10/31 9/24 - 10/1	800	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	tr(200)	HV
		(Yokkaichi City)	10/1 - 10/2		
Ocalra D£	20	Ocalra Jaint Brafactural Cayaman at Building Building	10/2 - 10/3	600	1117
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7	600	HV
		Timer (Osaka City)	10/7 - 10/8		

Local communities	No.	Monitored sites	Warm	season	Air complor
	110.	wiointored sites	Sampling dates	Measured value	Air sampler
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	tr(300)	HV
			10/16 - 10/17	ì í	
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	1.000	HV
,		***	10/8 - 10/9	,,,,,,	
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	400	HV
runa rion	23	remarking station (remarkety)	11/6 - 11/7	100	11 1
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(200)	HV
Similanc 1 Ici.	24	Oki National Acid Rain Observatory (Okinosinina Town)	10/29 - 10/30	11(200)	11 V
			10/30 - 10/31		
III	25	Historian City Volumenti Indian Historian Historian City	9/28 - 9/29	500	HV
Hiroshima City	23	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	300	нv
			9/29 - 9/30		
** *** *	2.	Y 1:D 0 . 1Y 07 11 Y 11	9/30 - 10/1	000	,
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and Environment (Yamaguchi City)	9/24 - 10/1	800	MV
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	500	MV
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	600	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
		, , , , , , , , , , , , , , , , , , ,	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	tr(300)	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	400	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	400	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(300)	MV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(300)	HV
		Environmental Science (Udo City)	9/25 - 9/26		
		` <i>''</i>	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	tr(200)	MV
111) 42411 1 1011		Environment (Miyazaki City)	11/0 11/12	(200)	1.1
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	500	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		11.
		and I wond Houses (Rugoomina Ony)	10/30 - 10/31		
Okinawa Pref.	36	Cono Hodo (Vynigami Villaga)	9/24 - 9/25	t=(100)	HV
Okinawa Prei.	30	Cape Hedo (Kunigami Village)	9/24 - 9/25	tr(100)	пv
			9/26 - 9/27		

⁽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) 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 : 2019 Detection Frequency (site) : 36/36 (Missing value : 0) Detection Frequency (sample): 36/36 (Missing value: 0)

Detection limit: 100 Quantification limit: 300

	Aggregated value
Geometric mean	400
Median	400
Maximum	2,300
Minimum	tr(100)

Local communities	No.	Monitored sites	Warm		Air sampler
TT 11 '1	1	W '1 C 1C1 C 1D (A 1'1 C')	Sampling dates	Measured value	
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	tr(200)	MV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	tr(100)	HV
11 ,			10/8 - 10/9	,	
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	500	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	300	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	tr(200)	MV
C		City)		, ,	
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	300	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	tr(200)	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental Protection (Koto Ward)	10/25 - 11/1	1,200	MV
		Frotection (Roto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	700	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	1,500	HV
Kanagawa Fici.	10	Kanagawa Environmentai Research Center (Iliratsuka City)	9/25 - 9/26	1,500	ΠV
			9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute (Yokohama City)	10/29 - 11/5	1,000	MV
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	tr(200)	HV
Milgata I ICI.	12	Oyama An Quanty Monitoring Station (Migata City)	10/7 - 10/8	11(200)	11 V
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	tr(100)	HV
,			10/16 - 10/17	,	
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	tr(100)	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	300	HV
		Environment (Kofu City)	10/29 - 10/30		
	1.0	V	10/30 - 10/31	(200)	
Nagano Pref.	16	Nagano Environmental Conservation Research Institute (Nagano City)	10/24 - 10/31	tr(200)	MV
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	1,000	HV
	- '	Environmental Sciences (Kakamigahara City)	10/29 - 10/30	-,	
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	2,300	MV
Mi- D. C	10	Mis Dufferton Heelsh and Davis	0/20 10/1	400	7117
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	400	HV
		(Yokkaichi City)	10/1 - 10/2		
Ocalra Drf	20	Ocales Joint Profestival Covernment Dellater Dellater 2	10/2 - 10/3	600	1137
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	600	HV
		Annex (Osaka City)	10/6 - 10/7		
			10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	tr(200)	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	900	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	500	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	tr(100)	HV
			10/29 - 10/30	( 1 )	
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	400	HV
City			9/29 - 9/30		-1.
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	900	MV
i amaguem i iei.	20	Environment (Yamaguchi City)	9/2 <del>4</del> = 10/1	300	1V1 V
		Environment (1 amaguem City)			
	27	Hasi Haalth and Walfana Contan (Hasi City)	9/24 - 10/1	700	MV
	21	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	/00	IVI V
T 1 1' D C	20	T 1 1' D C ( 1D 11' II 14 D) (' 1 1	0/20 10/1	000	1117
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	900	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	300	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	900	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	500	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	400	MV
-					
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	700	HV
		Environmental Science (Udo City)	9/25 - 9/26		
		` <i>''</i>	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	500	MV
		Environment (Miyazaki City)	-1.0 11.12		
		Ziri i dini di			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	500	HV
Nagosiiiila Fiel.	رر	and Public Health (Kagoshima City)	10/28 - 10/29	300	11 V
		and I done Health (Nagoshilia City)			
Ol-i P. C	27	Constitute (Venicous Villean)	10/30 - 10/31	4-(100)	7.13.7
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	tr(100)	HV
			9/25 - 9/26		
			9/26 - 9/27		

⁽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) 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 : 2019 Detection Frequency (site) : 23/36 (Missing value : 0) Detection Frequency (sample): 23/36 (Missing value: 0)

Detection limit: 90 Quantification limit: 260

	Aggregated value
Geometric mean	tr(140)
Median	tr(170)
Maximum	1,600
Minimum	nd

Local communities	No.	Monitored sites	Sampling dates	season Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Samuel Cita	2	Source Ad Pada (Source City)	10/7 - 10/8	1	HV
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	tr(220)	HV
			10/1 - 10/2		
			10/2 - 10/3	(150)	
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment (Sendai City)	10/4 - 10/11	tr(150)	MV
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura City)	10/25 - 11/1	nd	MV
CI I D C	7		10/20 11/5	,	
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara City)	10/29 - 11/5	nd	MV
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	400	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	tr(110)	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	460	HV
Tantaga wa 1101	10	Control (Control Control Contr	9/25 - 9/26 9/26 - 9/27		
Yokohama City	11	Yokohama Environmental Science Research Institute	10/29 - 11/5	360	MV
		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
Toyama Pref.	12	Tomomi Air Ovolity Monitoring Station (Tomomi City)	10/9 - 10/10 10/15 - 10/16	4	HV
Toyama Prei.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/13 - 10/16	nd	п٧
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	tr(130)	HV
		Environment (Kofu City)	10/29 - 10/30		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/30 - 10/31 10/24 - 10/31	nd	MV
ragano rici.	10	(Nagano City)	10/24 10/31	iid	141 4
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	280	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30 10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	690	MV
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	tr(200)	HV
14110 1 101.	1)	(Yokkaichi City)	10/1 - 10/2	u(200)	11 V
Ocalra Df	20	Ocalra Jaint Brafactural Cayaman at Building Building	10/2 - 10/3	200	7137
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2 Annex (Osaka City)	10/5 - 10/6 10/6 - 10/7	280	HV
		Times (Saka City)	10/7 - 10/8		

Local communities	No.	Monitored sites		season	Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	tr(110)	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	460	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	260	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
			10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(160)	HV
•			9/29 - 9/30	1 1	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	1,600	MV
8		Environment (Yamaguchi City)		,,,,,,,	
		( 3)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	tr(180)	MV
		Ting: Trainin and Western (Ting: ent)	<i>y,</i> 21 10/1	11(100)	
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	590	HV
Tokusiiiiiu Tiei.	20	Environmental Sciences Center (Tokushima City)	10/1 - 10/2	370	11 1
		Environmental Sciences Center (Tokushinia City)	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	nd	MV
Ragawa 1 Ici.	2)	Ragawa Frerectural Fubile Swimming Foot (Fakamatsu City)	10/23 - 10/20	na	1V1 V
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	tr(210)	HV
Limite I Ici.	30	(Uwajima City)	10/7 - 10/8	11(210)	11 V
		(Owajima City)	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	tr(230)	HV
Tukuoka 11ci.	31	Official City Government Building (Official City)	9/25 - 9/26	11(230)	11 V
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(230)	MV
Saga Prei.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(230)	IVI V
Kumamoto Pref.	22	V	9/24 - 9/25	220	HV
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	330	пν
		Environmental Science (Udo City)	***************************************		
1:D C	2.4	M. I.D.C. IX C. C. D.H. IX II. I	9/26 - 9/27	,	107
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
		Environment (Miyazaki City)			
TZ 1: 70 0	2.5	Tr. 1: D.C. 11 Cr. C.D.	10/20 10/20	. (100)	****
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(190)	HV
		and Public Health (Kagoshima City)	10/29 - 10/30		
			10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
	l		9/26 - 9/27		

⁽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) 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

# [23-4] Chlorinated tridecanes/air (pg/m³)

Monitored year : 2019 Detection Frequency (site) : 19/36 (Missing value : 0) Detection Frequency (sample): 19/36 (Missing value: 0)

Detection limit: 80 Quantification limit: 250

	Aggregated value
Geometric mean	tr(90)
Median	tr(90)
Maximum	1,600
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
Hokkuldo	•	Trammawa General Suspirercetalar Sarcau (Tisammawa City)	10/11 10/10	nu	111 1
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
виррого спу	_	Support Art Lark (Support City)	10/8 - 10/9	nu	11 4
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	360	HV
Twate Tier.		Sugo III Quanty Momenting Station (Tukizawa City)	10/1 - 10/2	300	111
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	nd	MV
1111) agi 11011		(Sendai City)	10/1 10/11		111 1
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	nd	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	nd	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	250	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	tr(200)	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	tr(170)	MV
Tenenumu eng		(Yokohama City)	10/25 11/0	12(170)	111 1
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	nd	HV
•			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	nd	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	nd	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	tr(130)	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
	<u></u>		10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	420	MV
10.7.0			0/00 10/1	(00)	
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	tr(90)	HV
		(Yokkaichi City)	10/1 - 10/2		
			10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	tr(130)	HV
		Annex (Osaka City)	10/6 - 10/7		
	l		10/7 - 10/8		

Local communities	No.	Monitored sites	Warm season		Air sampler
			Sampling dates	Measured value	
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	tr(190)	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	tr(200)	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(90)	HV
			9/29 - 9/30		
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	1,600	MV
i amaguem i iei.	20	Environment (Yamaguchi City)	)/2 <del>4</del> - 10/1	1,000	IVI V
		Environment (Tamaguem City)			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	tr(110)	MV
	21	hagi health and wehare center (hagi city)	9/24 - 10/1	tr(110)	IVI V
T 1 1' D C	20	T 1 1' D C ( 1D 11' II 14 D) (' 1 1	0/20 10/1	270	1117
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	270	HV
		Environmental Sciences Center (Tokushima City)	10/1 - 10/2		
			10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	nd	MV
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	tr(130)	HV
		(Uwajima City)	10/8 - 10/9		
			10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	tr(180)	HV
			9/25 - 9/26		
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	tr(110)	MV
8				, í	
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	tr(130)	HV
		Environmental Science (Udo City)	9/25 - 9/26		
		[	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
,	٠.	Environment (Miyazaki City)	11.0 11/12		272 7
		Divisormont (1911) azaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	tr(110)	HV
	33		10/28 - 10/29	u(110)	11 V
		and Public Health (Kagoshima City)			
	2.	G H 1 (W : 'W'II )	10/30 - 10/31		
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		

(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 5) nd: Not detected

⁽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.

# [24] Dicofol/air (pg/m³)

Monitored year: 2019

Detection Frequency (site): 5/36 (Missing value: 0)
Detection Frequency (sample): 5/36 (Missing value: 0)

Detection limit: 0.2 Quantification limit: 0.4

	Aggregated value
Geometric mean	nd
Median	nd
Maximum	0.4
Minimum	nd

Local communities	No.	Monitored sites	Warm Sampling dates	Measured value	Air sampler
Hokkaido	1	Kamikawa General Subprefectural Bureau (Asahikawa City)	10/11 - 10/18	nd	MV
HOKKAIGO	1	Kalinkawa General Subprefectural Bureau (Asalikawa City)	10/11 - 10/18	nd	IVI V
Sapporo City	2	Sapporo Art Park (Sapporo City)	10/7 - 10/8	nd	HV
варрого спу	_	suppore invitum (suppore only)	10/8 - 10/9		
			10/9 - 10/10		
Iwate Pref.	3	Sugo Air Quality Monitoring Station (Takizawa City)	9/30 - 10/1	nd	HV
			10/1 - 10/2		
			10/2 - 10/3		
Miyagi Pref.	4	Miyagi Prefectural Institute of Public Health and Environment	10/4 - 10/11	nd	MV
		(Sendai City)			
Yamagata Pref.	5	Yamagata Institute of Environmental Sciences (Murayama	9/24 - 10/1	nd	MV
		City)			
Ibaraki Pref.	6	Ibaraki Kasumigaura Environmental Science Center (Tsuchiura	10/25 - 11/1	nd	MV
		City)			
Chiba Pref.	7	Ichihara-Matsuzaki Air Quality Monitoring Station (Ichihara	10/29 - 11/5	nd	MV
		City)			
Tokyo Met.	8	Tokyo Metropolitan Research Institute for Environmental	10/25 - 11/1	tr(0.2)	MV
		Protection (Koto Ward)			
	9	Chichijima Island (Ogasawara Village)	10/3 - 10/9	nd	MV
Kanagawa Pref.	10	Kanagawa Environmental Research Center (Hiratsuka City)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
Yokohama City	11	Yokohama Environmental Science Research Institute	9/26 - 9/27 10/29 - 11/5	nd	MV
r okonama City		(Yokohama City)			
Niigata Pref.	12	Oyama Air Quality Monitoring Station (Niigata City)	10/7 - 10/8	nd	HV
1 111 Gana 1 101.			10/8 - 10/9		
			10/9 - 10/10		
Toyama Pref.	13	Tonami Air Quality Monitoring Station (Tonami City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Ishikawa Pref.	14	Ishikawa Prefectural Institute of Public Health and	10/15 - 10/16	nd	HV
		Environmental Science (Kanazawa City)	10/16 - 10/17		
			10/17 - 10/18		
Yamanashi Pref.	15	Yamanashi Prefectural Institute of Public Health and	10/28 - 10/29	nd	HV
		Environment (Kofu City)	10/29 - 10/30		
			10/30 - 10/31		
Nagano Pref.	16	Nagano Environmental Conservation Research Institute	10/24 - 10/31	nd	MV
		(Nagano City)			
Gifu Pref.	17	Gifu Prefectural Research Institute for Health and	10/28 - 10/29	nd	HV
		Environmental Sciences (Kakamigahara City)	10/29 - 10/30		
			10/30 - 10/31		
Nagoya City	18	Chikusa Ward Heiwa Park (Nagoya City)	9/24 - 10/1	nd	MV
			0/00		
Mie Pref.	19	Mie Prefecture Health and Environment Research Institute	9/30 - 10/1	nd	HV
		(Yokkaichi City)	10/1 - 10/2		
	L_		10/2 - 10/3		
Osaka Pref.	20	Osaka Joint Prefectural Government Building, Building 2	10/5 - 10/6	nd	HV
		Annex (Osaka City)	10/6 - 10/7		
	1		10/7 - 10/8		

Local communities	No.	Monitored sites	Warm season		Air sampler
			Sampling dates	Measured value	Air sampier
Hyogo Pref.	21	Hyogo Prefectural Environmental Research Center (Kobe City)	10/15 - 10/16	nd	HV
			10/16 - 10/17		
			10/17 - 10/18		
Kobe City	22	Kobe Institute of Health (Kobe City)	10/7 - 10/8	nd	HV
			10/8 - 10/9		
			10/9 - 10/10		
Nara Pref.	23	Tenri Air Quality Monitoring Station (Tenri City)	11/5 - 11/6	nd	HV
			11/6 - 11/7		
			11/7 - 11/8		
Shimane Pref.	24	Oki National Acid Rain Observatory (Okinoshima Town)	10/28 - 10/29	nd	HV
		,	10/29 - 10/30		
			10/30 - 10/31		
Hiroshima City	25	Hiroshima City Kokutaiji Junior High School (Hiroshima City)	9/28 - 9/29	tr(0.2)	HV
,			9/29 - 9/30	( )	
			9/30 - 10/1		
Yamaguchi Pref.	26	Yamaguchi Prefectural Institute of Public Health and	9/24 - 10/1	nd	MV
Tunnagarin Tron		Environment (Yamaguchi City)	<i>y,</i> <b>2</b> . 10, 1		112 1
		(			
	27	Hagi Health and Welfare Center (Hagi City)	9/24 - 10/1	nd	MV
		Tragi Treater and Westure Contest (Tragi City)	<i>5/21</i> 10/1	na na	111 1
Tokushima Pref.	28	Tokushima Prefectural Public Health, Pharmaceutical and	9/30 - 10/1	tr(0.2)	HV
	20	Environmental Sciences Center (Tokushima City)	10/1 - 10/2	11(0.2)	11 V
		Environmental Sciences Center (Tokushima City)	10/2 - 10/3		
Kagawa Pref.	29	Kagawa Prefectural Public Swimming Pool (Takamatsu City)	10/25 - 10/28	nd	MV
Ragawa 1 Ici.	2)	Ragawa i refecturar i uone swimining i oor (i akamatsu City)	10/23 - 10/20	na	1V1 V
Ehime Pref.	30	Ehime Prefectural Government Nanyo Regional Office	10/7 - 10/8	nd	HV
Emine 1 ter.	30	(Uwajima City)	10/8 - 10/9	na na	11 1
		(C. Agina Chy)	10/9 - 10/10		
Fukuoka Pref.	31	Omuta City Government Building (Omuta City)	9/24 - 9/25	tr(0.2)	HV
Tukuoka Fici.	31	Omata City Government Building (Omata City)	9/25 - 9/26	11(0.2)	11 V
			9/26 - 9/27		
Saga Pref.	32	Saga Prefectural Environmental Research Center (Saga City)	9/24 - 10/1	0.4	MV
Saga 1 ICI.	32	Saga i refecturar Environmentar Research Center (Saga City)	)/2 <del>4</del> - 10/1	0.4	1V1 V
Kumamoto Pref.	33	Kumamoto Prefectural Institute of Public Health and	9/24 - 9/25	nd	HV
ramamoto 1101.	55	Environmental Science (Udo City)	9/25 - 9/26	iid	11 V
		Ziii ii ziiii ziii zii zii zii zii zii z	9/26 - 9/27		
Miyazaki Pref.	34	Miyazaki Prefectural Institute for Public Healthand	11/5 - 11/12	nd	MV
IVII Y AZAKI FICI.	J <b>4</b>	Environment (Miyazaki City)	11/3 - 11/12	nu	1V1 V
		Environment (wilyazaki City)			
Kagoshima Pref.	35	Kagoshima Prefectural Institute for Environmental Research	10/28 - 10/29	nd	HV
Kagosiiina Pref.	33		10/28 - 10/29	na	нv
		and Public Health (Kagoshima City)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
011 - 0	26	C H 1 (K : 'A'II )	10/30 - 10/31	1	1137
Okinawa Pref.	36	Cape Hedo (Kunigami Village)	9/24 - 9/25	nd	HV
			9/25 - 9/26		
			9/26 - 9/27		

⁽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) 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