

平成20年度化学物質環境実態調査結果 地域別データ

調査名：モニタリング調査

調査媒体：底質

地方公共団体：北海道

調査地点：天塩川恩根内大橋（美深町）

| 調査対象物質 | 検体番号 | 測定値 | 検出下限値 | 定量下限値 |
|---|------|----------|-------|-------|
| [1] PCB類 (pg/g-dry) | 1 | 1,200 | **1.2 | **3.3 |
| | 2 | 730 | | |
| | 3 | 1,500 | | |
| [1-1] モノクロロビフェニル類 (pg/g-dry) | 1 | 2.9 | 0.3 | 0.7 |
| | 2 | 3.0 | | |
| | 3 | 2.8 | | |
| [1-2] ジクロロビフェニル類 (pg/g-dry) | 1 | 990 | 0.2 | 0.5 |
| | 2 | 510 | | |
| | 3 | 1,200 | | |
| [1-3] トリクロロビフェニル類 (pg/g-dry) | 1 | 35 | 0.1 | 0.4 |
| | 2 | 40 | | |
| | 3 | 56 | | |
| [1-4] テトラクロロビフェニル類 (pg/g-dry) | 1 | 59 | 0.1 | 0.3 |
| | 2 | 62 | | |
| | 3 | 91 | | |
| [1-4-1] コプラナーPCBのうち 3,3',4,4'-テトラクロロビフェニル (#77) (pg/g-dry) | 1 | 2.6 | 0.1 | 0.3 |
| | 2 | 2.5 | | |
| | 3 | 3.8 | | |
| [1-4-2] コプラナーPCBのうち 3,4,4',5'-テトラクロロビフェニル (#81) (pg/g-dry) | 1 | nd | 0.2 | 0.5 |
| | 2 | nd | | |
| | 3 | nd | | |
| [1-5] ペンタクロロビフェニル類 (pg/g-dry) | 1 | 47 | 0.05 | 0.13 |
| | 2 | 54 | | |
| | 3 | 72 | | |
| [1-5-1] コプラナーPCBのうち 2,3,3',4,4'-ペンタクロロビフェニル (#105) (pg/g-dry) | 1 | 4.0 | 0.1 | 0.4 |
| | 2 | 5.0 | | |
| | 3 | 6.8 | | |
| [1-5-2] コプラナーPCBのうち 2,3,4,4',5'-ペンタクロロビフェニル (#114) (pg/g-dry) | 1 | 0.4 | 0.1 | 0.3 |
| | 2 | 0.5 | | |
| | 3 | 0.7 | | |
| [1-5-3] コプラナーPCBのうち 2,3',4,4',5'-ペンタクロロビフェニル (#118) (pg/g-dry) | 1 | 7.8 | 0.2 | 0.5 |
| | 2 | 10 | | |
| | 3 | 13 | | |
| [1-5-4] コプラナーPCBのうち 2',3,4,4',5'-ペンタクロロビフェニル (#123) (pg/g-dry) | 1 | 0.3 | 0.1 | 0.3 |
| | 2 | 0.4 | | |
| | 3 | 0.5 | | |
| [1-5-5] コプラナーPCBのうち 3,3',4,4',5'-ペンタクロロビフェニル (#126) (pg/g-dry) | 1 | tr(0.12) | 0.05 | 0.13 |
| | 2 | 0.18 | | |
| | 3 | 0.21 | | |
| [1-6] ヘキサクロロビフェニル類 (pg/g-dry) | 1 | 37 | 0.1 | 0.2 |
| | 2 | 40 | | |
| | 3 | 55 | | |
| [1-6-1] コプラナーPCBのうち 2,3,3',4,4',5'-ヘキサクロロビフェニル (#156) (pg/g-dry) | 1 | 1.1 | 0.1 | 0.3 |
| | 2 | 1.3 | | |
| | 3 | 1.7 | | |
| [1-6-2] コプラナーPCBのうち 2,3,3',4,4',5'-ヘキサクロロビフェニル (#157) (pg/g-dry) | 1 | 0.2 | 0.1 | 0.2 |
| | 2 | 0.3 | | |
| | 3 | 0.4 | | |
| [1-6-3] コプラナーPCBのうち 2,3',4,4',5,5'-ヘキサクロロビフェニル (#167) (pg/g-dry) | 1 | 0.5 | 0.1 | 0.3 |
| | 2 | 0.5 | | |
| | 3 | 0.7 | | |
| [1-6-4] コプラナーPCBのうち 3,3',4,4',5,5'-ヘキサクロロビフェニル (#169) (pg/g-dry) | 1 | nd | 0.1 | 0.3 |
| | 2 | nd | | |
| | 3 | nd | | |
| [1-7] ヘプタクロロビフェニル類 (pg/g-dry) | 1 | 16 | 0.08 | 0.20 |
| | 2 | 23 | | |
| | 3 | 34 | | |
| [1-7-1] コプラナーPCBのうち 2,2',3,3',4,4',5'-ヘプタクロロビフェニル (#170) (pg/g-dry) | 1 | 1.8 | 0.2 | 0.4 |
| | 2 | 2.2 | | |
| | 3 | 3.2 | | |
| [1-7-2] コプラナーPCBのうち 2,2',3,4,4',5,5'-ヘプタクロロビフェニル (#180) (pg/g-dry) | 1 | 4.1 | 0.3 | 0.7 |
| | 2 | 5.0 | | |
| | 3 | 7.2 | | |
| [1-7-3] コプラナーPCBのうち 2,3,3',4,4',5,5'-ヘプタクロロビフェニル (#189) (pg/g-dry) | 1 | nd | 0.2 | 0.5 |
| | 2 | nd | | |
| | 3 | nd | | |

| 調査対象物質 | 検体番号 | 測定値 | 検出下限値 | 定量下限値 |
|--|------|-------|-------|-------|
| [1-8] オクタクロロビフェニル類 (pg/g-dry) | 1 | 2.7 | 0.1 | 0.3 |
| | 2 | 3.2 | | |
| | 3 | 5.0 | | |
| [1-9] ノナクロロビフェニル類 (pg/g-dry) | 1 | 0.42 | 0.09 | 0.22 |
| | 2 | 0.97 | | |
| | 3 | 1.3 | | |
| [1-10] デカクロロビフェニル (pg/g-dry) | 1 | 0.5 | 0.1 | 0.3 |
| | 2 | 0.9 | | |
| | 3 | 1.1 | | |
| [2] HCB (ヘキサクロロベンゼン) (pg/g-dry) | 1 | 39 | 0.8 | 2.0 |
| | 2 | 51 | | |
| | 3 | 69 | | |
| [3] アルドリン (pg/g-dry) | 1 | tr(2) | 1 | 3 |
| | 2 | 3 | | |
| | 3 | 3 | | |
| [4] デイルドリン (pg/g-dry) | 1 | 18 | 0.5 | 1.2 |
| | 2 | 29 | | |
| | 3 | 42 | | |
| [5] エンドリン (pg/g-dry) | 1 | 2.0 | 0.7 | 1.9 |
| | 2 | 2.8 | | |
| | 3 | 3.9 | | |
| [6] DDT類 (pg/g-dry) | 1 | 1,200 | ※※2.9 | ※※7.1 |
| | 2 | 1,700 | | |
| | 3 | 2,100 | | |
| [6-1] <i>p,p'</i> -DDT (pg/g-dry) | 1 | 260 | 0.5 | 1.2 |
| | 2 | 330 | | |
| | 3 | 340 | | |
| [6-2] <i>p,p'</i> -DDE (pg/g-dry) | 1 | 500 | 0.7 | 1.7 |
| | 2 | 720 | | |
| | 3 | 910 | | |
| [6-3] <i>p,p'</i> -DDD (pg/g-dry) | 1 | 380 | 0.4 | 1.0 |
| | 2 | 520 | | |
| | 3 | 650 | | |
| [6-4] <i>o,p'</i> -DDT (pg/g-dry) | 1 | 34 | 0.6 | 1.5 |
| | 2 | 44 | | |
| | 3 | 53 | | |
| [6-5] <i>o,p'</i> -DDE (pg/g-dry) | 1 | 18 | 0.6 | 1.4 |
| | 2 | 25 | | |
| | 3 | 34 | | |
| [6-6] <i>o,p'</i> -DDD (pg/g-dry) | 1 | 46 | 0.1 | 0.3 |
| | 2 | 65 | | |
| | 3 | 79 | | |
| [7] クロルデン類 (pg/g-dry) | 1 | 51 | ※※4 | ※※10 |
| | 2 | 76 | | |
| | 3 | 130 | | |
| [7-1] <i>cis</i> -クロルデン (pg/g-dry) | 1 | 12 | 0.9 | 2.4 |
| | 2 | 18 | | |
| | 3 | 29 | | |
| [7-2] <i>trans</i> -クロルデン (pg/g-dry) | 1 | 17 | 0.8 | 2.0 |
| | 2 | 25 | | |
| | 3 | 38 | | |
| [7-3] オキシクロルデン (pg/g-dry) | 1 | tr(2) | 1 | 3 |
| | 2 | 3 | | |
| | 3 | 5 | | |
| [7-4] <i>cis</i> -ノナクロル (pg/g-dry) | 1 | 4.8 | 0.2 | 0.6 |
| | 2 | 6.6 | | |
| | 3 | 12 | | |
| [7-5] <i>trans</i> -ノナクロル (pg/g-dry) | 1 | 15 | 0.8 | 2.2 |
| | 2 | 23 | | |
| | 3 | 46 | | |
| [8] ヘプタクロル類 (pg/g-dry) | 1 | 10 | ※※3 | ※※8 |
| | 2 | 15 | | |
| | 3 | 22 | | |
| [8-1] ヘプタクロル (pg/g-dry) | 1 | tr(2) | 1 | 4 |
| | 2 | tr(2) | | |
| | 3 | tr(2) | | |
| [8-2] <i>cis</i> -ヘプタクロルエポキシド (pg/g-dry) | 1 | 8 | 1 | 2 |
| | 2 | 13 | | |
| | 3 | 20 | | |
| [8-3] <i>trans</i> -ヘプタクロルエポキシド (pg/g-dry) | 1 | nd | 0.7 | 1.7 |
| | 2 | nd | | |
| | 3 | nd | | |

| 調査対象物質 | 検体番号 | 測定値 | 検出下限値 | 定量下限値 |
|---|------|----------|-------|-------|
| [9-1] 2-endo,3-exo,5-endo,6-exo,8,8,10,10-オクタクロボルナン (Parlar-26) (pg/g-dry) | 1 | nd | 5 | 12 |
| | 2 | nd | | |
| | 3 | nd | | |
| [9-2] 2-endo,3-exo,5-endo,6-exo,8,8,9,10,10-ノナクロボルナン (Parlar-50) (pg/g-dry) | 1 | nd | 6 | 17 |
| | 2 | nd | | |
| | 3 | nd | | |
| [9-3] 2,2,5,5,8,9,9,10,10-ノナクロボルナン (Parlar-62) (pg/g-dry) | 1 | nd | 40 | 90 |
| | 2 | nd | | |
| | 3 | nd | | |
| [10] マイレックス (pg/g-dry) | 1 | nd | 0.3 | 0.7 |
| | 2 | tr(0.6) | | |
| | 3 | 0.9 | | |
| [11-1] α -HCH (pg/g-dry) | 1 | 21 | 0.6 | 1.6 |
| | 2 | 32 | | |
| | 3 | 41 | | |
| [11-2] β -HCH (pg/g-dry) | 1 | 72 | 0.3 | 0.8 |
| | 2 | 98 | | |
| | 3 | 150 | | |
| [11-3] γ -HCH (別名: リンデン) (pg/g-dry) | 1 | 8.0 | 0.4 | 0.9 |
| | 2 | 8.5 | | |
| | 3 | 15 | | |
| [11-4] δ -HCH (pg/g-dry) | 1 | 9 | 1 | 2 |
| | 2 | 10 | | |
| | 3 | 16 | | |
| [12] クロルデコン (pg/g-dry) | 1 | nd | 0.16 | 0.42 |
| | 2 | nd | | |
| | 3 | nd | | |
| [14] 2-クロロ-4-エチルアミノ-6-イソプロピルアミノ-1,3,5-トリアジン (別名: アトラジン) (ng/g-dry) | 1 | nd | 0.13 | 0.34 |
| | 2 | nd | | |
| | 3 | nd | | |
| [15] ジオクチルスズ化合物 (ng/g-dry) | 1 | tr(0.25) | 0.09 | 0.27 |
| | 2 | tr(0.26) | | |
| | 3 | 0.35 | | |
| [17] 2,6-ジ- <i>tert</i> -ブチル-4-メチルフェノール (別名: BHT) (ng/g-dry) | 1 | nd | 1.7 | 5.1 |
| | 2 | nd | | |
| | 3 | nd | | |
| [18] ジベンゾチオフェン (ng/g-dry) | 1 | tr(0.19) | 0.15 | 0.39 |
| | 2 | tr(0.34) | | |
| | 3 | tr(0.32) | | |
| [19] 2,2,2-トリクロロ-1,1-ビス(4-クロロフェニル)エタノール (別名: ケルセン又はジコホル) (ng/g-dry) | 1 | 0.16 | 0.063 | 0.16 |
| | 2 | tr(0.12) | | |
| | 3 | tr(0.11) | | |
| [20] 2,4,6-トリ- <i>tert</i> -ブチルフェノール (ng/g-dry) | 1 | nd | 1.7 | 4.4 |
| | 2 | nd | | |
| | 3 | nd | | |
| [21] フタル酸ジ- <i>n</i> -ブチル (ng/g-dry) | 1 | nd | 44 | 130 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22] ポリ塩化ナフタレン類 (pg/g-dry) | 1 | tr(38) | ※※30 | ※※84 |
| | 2 | tr(47) | | |
| | 3 | tr(57) | | |
| [22-1] モノクロロナフタレン類 (pg/g-dry) | 1 | nd | 6.6 | 20 |
| | 2 | nd | | |
| | 3 | tr(7.6) | | |
| [22-1-1] 2-クロロナフタレン (pg/g-dry) | 1 | nd | 6.6 | 20 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-2] ジクロロナフタレン類 (pg/g-dry) | 1 | tr(3.3) | 2.5 | 6.6 |
| | 2 | tr(4.8) | | |
| | 3 | tr(4.1) | | |
| [22-2-1] 1,5-ジクロロナフタレン (pg/g-dry) | 1 | nd | 2.5 | 6.6 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-2-2] 2,7-ジクロロナフタレン (pg/g-dry) | 1 | nd | 1.2 | 3.1 |
| | 2 | nd | | |
| | 3 | tr(1.2) | | |
| [22-3] トリクロロナフタレン類 (pg/g-dry) | 1 | tr(5.5) | 3.3 | 8.9 |
| | 2 | 9.1 | | |
| | 3 | tr(6.8) | | |
| [22-3-1] 1,2,3-トリクロロナフタレン (pg/g-dry) | 1 | nd | 3.3 | 8.9 |
| | 2 | nd | | |
| | 3 | nd | | |

| 調査対象物質 | 検体番号 | 測定値 | 検出下限値 | 定量下限値 |
|--|------|---------|-------|-------|
| [22-4] テトラクロロナフタレン類(pg/g-dry) | 1 | 21 | 4.8 | 13 |
| | 2 | 23 | | |
| | 3 | 25 | | |
| [22-4-1] 1,2,3,4-テトラクロロナフタレン(pg/g-dry) | 1 | nd | 3.4 | 9.2 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-4-2] 1,2,3,8-テトラクロロナフタレン(pg/g-dry) | 1 | nd | 3.3 | 9.0 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-4-3] 1,2,5,6-及び1,2,3,5-テトラクロロナフタレン(pg/g-dry) | 1 | nd | 3.5 | 9.4 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-4-4] 1,4,5,8-テトラクロロナフタレン(pg/g-dry) | 1 | nd | 4.8 | 13 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-4-5] 2,3,6,7-テトラクロロナフタレン(pg/g-dry) | 1 | nd | 3.0 | 8.0 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-5] ペンタクロロナフタレン類(pg/g-dry) | 1 | 8.5 | 1.9 | 5.2 |
| | 2 | 10 | | |
| | 3 | 13 | | |
| [22-5-1] 1,2,3,4,6-ペンタクロロナフタレン(pg/g-dry) | 1 | nd | 1.8 | 4.8 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-5-2] 1,2,3,5,7-ペンタクロロナフタレン(pg/g-dry) | 1 | nd | 1.9 | 5.0 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-5-3] 1,2,3,5,8-ペンタクロロナフタレン(pg/g-dry) | 1 | nd | 1.9 | 5.2 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-6] ヘキサクロロナフタレン類(pg/g-dry) | 1 | nd | 3.7 | 10 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-6-1] 1,2,3,4,6,7-ヘキサクロロナフタレン(pg/g-dry) | 1 | nd | 1.6 | 4.3 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-6-2] 1,2,3,5,7,8-ヘキサクロロナフタレン(pg/g-dry) | 1 | nd | 1.7 | 4.7 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-6-3] 1,2,4,5,7,8-ヘキサクロロナフタレン(pg/g-dry) | 1 | nd | 3.7 | 10 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-7] ヘプタクロロナフタレン類(pg/g-dry) | 1 | nd | 3.1 | 8.3 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-7-1] 1,2,3,4,5,6,7-ヘプタクロロナフタレン(pg/g-dry) | 1 | nd | 3.1 | 8.3 |
| | 2 | nd | | |
| | 3 | nd | | |
| [22-8] オクタクロロナフタレン(pg/g-dry) | 1 | nd | 4.4 | 12 |
| | 2 | nd | | |
| | 3 | nd | | |
| [23] リン酸トリ- <i>n</i> -ブチル(ng/g-dry) | 1 | nd | 0.73 | 2.2 |
| | 2 | nd | | |
| | 3 | tr(1.5) | | |

(注1) 検出下限値以上を検出とした。

(注2) ※※定量[検出]下限値は同族体毎の定量[検出]下限値の合計値とした。