**SUPPLEMENTARY MATERIALS – ДОПОЛНИТЕЛЬНЫЕ МАТЕРИАЛЫ**

**The nature of soil dioxin contamination near former landfills**

**Характер загрязнения диоксинами почвы вблизи мест захоронения твердых бытовых отходов**

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**Почвоведение.**



**Fig. S1.** 2,3,7,8-substituted PCDD/F congener profiles (a) and homologue profiles (b) in three samples with highest contamination levels (10, 14 and 24) and one urban soil sample with moderate contamination level (22).

**Рис. S1.** Профили ПХДД/Ф в трех точках с наиболее высоким уровнем загрязнения (10, 14 и 24), а также профиль одной из городских почв со средним уровнем загрязнения (22), по 2,3,7,8-замещенным конгенерам (a) и по гомологам (b).



**Fig. S2.** Loadings plot of 2,3,7,8-substituted congeners (a and b) and of homologues (c).

**Рис. S2.** Факторные нагрузки по 2,3,7,8-замещенным конгенерам (a и b) и по гомологам (c).

**Table S1.** Dioxin contamination levels of urban soils in different countries. Min and max values are provided in parenthesis where available.

**Таблица S1.** Уровни загрязнения городских почв диоксинами в разных странах. В скобках указаны минимальное и максимальное значения (при наличии).

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| --- | --- | --- |
| Location | Total TEQ | TEF system |
| Russia | Moscow [1] | 6.8 (3.6-15.7) – parks5.6 (0.27-15.4) – residential area5.7 (0.67-16.1) – industrial zones | WHO-TEF1998 |
| Chechen Republic [3] | 0.68 (0.05-1.99) – residential area 41.85 (0.16-543.2) – anthropogenic and post-war pollution | NA |
| Ufa [2] | 3.19 | I-TEF |
| Chita [2] | 1.94 | I-TEF |
| Ukhta [2] | 1.19 | I-TEF |
| Vladivostok [2] | 437.7 | I-TEF |
| Kurgan [2] | 3.69 | I-TEF |
| Austria [5] | Salzburg | 3.42 (1.0-8.3) | I-TEF |
| UK [6] |  | 26 | I-TEF |
| Canada [4] |  | 11.3 | I-TEF |
| Czech Republic [7] | Beroun | 1.82 (0.97-7.11) | I-TEF |
|  | Zlin | 2.42(1.27-4.45) | I-TEF |
| Denmark [12] |  | 0.74 (0.25-3.0) | I-TEF |
| USA [11] |  | 4.1-51.2\* | WHO-TEF2005 |
| China [8] |  | 0.1–5.7\* | WHO-TEF1998 |
| Australia [9] | Darwin | 1.4 | WHO-TEF1998 |
| Cairns | 2.1-9.2 | WHO-TEF1998 |
| Brisbane | 3.0-7.5 | WHO-TEF1998 |
| Newcastle | 3.3 | WHO-TEF1998 |
| Sydney | 4.0-9.7 | WHO-TEF1998 |
| Canberra  | 0.72 | WHO-TEF1998 |
| Wollongong  | 3.3-23  | WHO-TEF1998 |
| Philippines [10] |  | 520 – open dumping site | WHO-TEF1998 |
| Cambodia [10] |  | 390 – open dumping site1.9 – background urban soil | WHO-TEF1998 |
| India [10] |  | 47 – open dumping site0.2– background urban soil | WHO-TEF1998 |
| Vietnam [10] | Hanoi | 95 – open dumping site1 – background urban soil | WHO-TEF1998 |
| Ho Chi Minh | 2.21 – open dumping site1.15 – background urban soil | WHO-TEF1998 |

\*range of mean values from different cities

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