

Figure S1. Points of urban soils and road dust sampling within the territory of Alushta, Yalta and Sebastopol. **Sampling points:** 1 – urban soils, 2 – road dust. **Land use zones:** 1 – industrial, 2 – residential with multi-storey buildings, 3 – residential with low-rise buildings, 4 – residential and recreational, 5 – agrogenic, 6 – recreational. Railway (1) and streets with: 1 – large roads, 2 – medium roads, 3 – small roads.

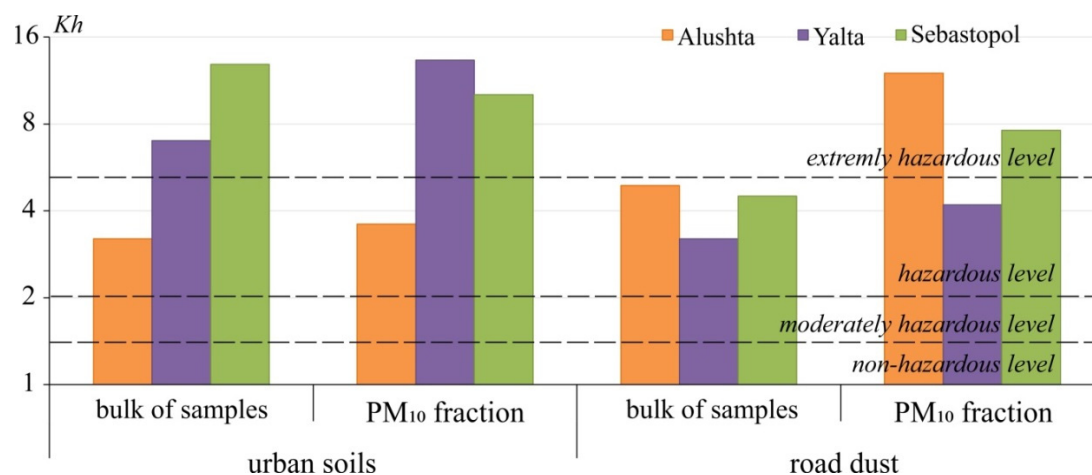


Figure S2. K_h coefficients and levels of environmental hazard of BaP contamination of urban soils, road dust and their PM₁₀ fractions in Alushta, Yalta and Sebastopol.

Table S1. Physicochemical properties of background soils, urban soils and road dust in Alushta, Yalta and Sebastopol.

| Object (number of samples) | PM _i , % | | PM ₁₋₁₀ , % | | PM ₁₀₋₅₀ , % | | PM _{>50} , % | | pH | | EC, µS / cm | | C _{org} , % | |
|-------------------------------|-----------------------|-------------|------------------------|-------------|-------------------------|-------------|--------------------------|-------------|-----------------------|-------------|------------------------|-------------|-----------------------|-------------|
| | <u>mean</u> | <i>Cv</i> , | <u>mean</u> | <i>Cv</i> , | <u>mean</u> | <i>Cv</i> , | <u>mean</u> | <i>Cv</i> , | <u>mean</u> | <i>Cv</i> , | <u>mean</u> | <i>Cv</i> , | <u>mean</u> | <i>Cv</i> , |
| | min–max | % | min–max | % | min–max | % | min–max | % | min–max | % | min–max | % | min–max | % |
| <i>Background soils</i> | | | | | | | | | | | | | | |
| Cambisols (10) | <u>5.0</u> 2.8–7.6 | 31 | <u>34</u> 27–43 | 16 | <u>20</u> 9.3–34 | 34 | <u>41</u> 17–53 | 28 | <u>6.7</u> 6.2–7.6 | 8.0 | <u>103</u> 27–220 | 79 | <u>2.1</u> 1.2–4.0 | 50 |
| Haplic Kastanozem (10) | <u>14</u> 11–19 | 18 | <u>50</u> 47–57 | 5.9 | <u>31</u> 24–40 | 16 | <u>5.0</u> 0.1–14 | 86 | <u>7.1</u> 6.0–7.7 | 6.6 | <u>157</u> 45–225 | 31 | <u>1.7</u> 0.8–2.3 | 26 |
| <i>Alushta</i> | | | | | | | | | | | | | | |
| Urban soils (49) | <u>4.0</u> 1.1–14 | 63 | <u>26</u> 9–52 | 35 | <u>24</u> 10–39 | 29 | <u>46</u> 2.8–77 | 36 | <u>7.6</u> 6.0–8.2 | 5.0 | <u>320</u> 56–1341 | 88 | <u>4.0</u> 0.7–16 | 66 |
| Road dust (29) | <u>3.0</u> 1.0–4.8 | 38 | <u>19</u> 6.2–30 | 38 | <u>14</u> 3.8–36 | 56 | <u>64</u> 45–84 | 16 | <u>7.5</u> 7.1–8.2 | 3.0 | <u>283</u> 104–1479 | 97 | <u>1.8</u> 0.7–3.5 | 47 |
| <i>Yalta</i> | | | | | | | | | | | | | | |
| Urban soils (69) | <u>5.0</u> 1.4–12 | 47 | <u>31</u> 13–51 | 30 | <u>33</u> 7.4–48 | 24 | <u>31</u> 16–65 | 52 | <u>8.4</u> 7.3–9.3 | 4.8 | <u>542</u> 84–5150 | 150 | <u>3.8</u> 0.7–11 | 63 |
| Road dust (57) | <u>5.0</u> 2.5–11 | 38 | <u>29</u> 16–54 | 34 | <u>18</u> 6.5–44 | 55 | <u>48</u> 13–69 | 38 | <u>8.9</u> 8.0–11 | 7.7 | <u>315</u> 119–1148 | 54 | <u>1.7</u> 0.2–4.9 | 61 |
| <i>Sebastopol</i> | | | | | | | | | | | | | | |
| Urban soils (69) | <u>6.0</u> 2.6–13 | 39 | <u>32</u> 17–52 | 27 | <u>33</u> 14–45 | 18 | <u>29</u> 1.2–59 | 52 | <u>8.4</u> 7.9–9.0 | 2.6 | <u>315</u> 119–762 | 50 | <u>2.8</u> 0.5–5.5 | 38 |
| Road dust (70) | <u>6.0</u> 2.8–9.3 | 25 | <u>26</u> 13–47 | 25 | <u>13</u> 6.7–23 | 28 | <u>55</u> 29–72 | 16 | <u>8.7</u> 7.8–9.8 | 4.2 | <u>279</u> 117–764 | 54 | <u>1.5</u> 0.6–3.3 | 42 |