



Corrigendum

Corrigendum to “Emerging Organic Contaminants in Chinese Surface Water: Identification of Priority Pollutants” [Engineering 11 (2022) 111–125]



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The authors regret that the acceptable daily intake (ADI) values of 0.082 $\mu\text{g}\cdot\text{kg}^{-1}\cdot\text{d}^{-1}$ for *N,N*-diethyl-3-methyl benzoyl amide (DEET), 0.19 $\mu\text{g}\cdot\text{kg}^{-1}\cdot\text{d}^{-1}$ for triclosan, and 0.83 $\mu\text{g}\cdot\text{kg}^{-1}\cdot\text{d}^{-1}$ for acetaminophen cited from a review by Murray et al. [1], as shown in Table S4 in Appendix A of the original article, were not correct. Blanset et al. [2] provided the original values of 100, 50, and 153 $\mu\text{g}\cdot\text{kg}^{-1}\cdot\text{d}^{-1}$ for DEET, triclosan, and acetaminophen, respectively. In the present study, priority index was used as a multi-criteria screening approach that is limited affected by individual criteria. As a result, triclosan was still included in the top-priority group I, but the priority of DEET changed from group II to group III, and acetaminophen remained in group III. The number of substances in priority II and III becomes 36 and 59, respectively. The ADI data, predicted no effect concentrations for humans (PNEC_{hum}), hazard potential, human health risk quotient (RQ_{hum}), priority index values, and priority groups of these chemicals have been corrected in Tables 1–3, 5, Tables S4–S6, S8–S10, S12, and S16 in Appendix A.

In addition, during manuscript preparation, errors occurred when copying several PNEC_{hum} values from Table S5 to Table S8. The PNEC_{hum} data listed in Table S8 were incorrect, which affected the RQ_{hum} results, but the prioritization result was not affected. The PNEC_{hum} and RQ_{hum} data were corrected in Tables 1 and 2, and Table S8. The ranking list according to individual RQ_{hum} values in Table S13 in Appendix A and the top 50 emerging organic contaminants (EOCs) determined by RQ_{hum} values in Table 3 were also corrected.

The corrected Tables 1–3, 5, Tables S4–S6, S8–S10, S12, S13, and S16 are provided in the supplemental data to this corrigendum.

The text was corrected as follows.

(1) In the Abstract, “37 chemicals were defined as high priority,” where “37” should be “36”; and “Overall, 20 pollutants were recommended as priority EOCs” where “20” should be “19.”

(2) In Section 3.3 Risk assessment, “In total, six EOCs exhibited a potential risk to human health with RQ_{hum} values greater than 0.1. Of these compounds, 17 α -ethinylestradiol and perfluorooctanoate (PFOA) exhibited the highest human health risk with RQ_{hum} values of 43.41 and 1.92, respectively. Human health effects were also identified for estriol, 17 α -estradiol, disulfoton, and estrone with RQ_{hum} values of 0.8, 0.2, 0.1, and 0.1, respectively. Four EOCs, namely 17 α -ethinylestradiol, disulfoton, estriol, and estrone, posed risks to both human health and ecological systems.” should be corrected to “In total, five EOCs exhibited a potential risk to human health with RQ_{hum} values greater than 0.1. Of these compounds, 17 α -ethinylestradiol exhibited the highest human health risk, with an RQ_{hum} value of 43.4. Human health effects were also identified for estriol, perfluorooctanoate (PFOA), 17 α -estradiol, and estrone, with RQ_{hum} values of 0.8, 0.7, 0.2, and 0.1, respectively. Three EOCs, namely 17 α -ethinylestradiol, estriol, and estrone, posed risks to both human health and ecological systems.”

(3) In Section 3.4 Priority index, “Group II (37 compounds with high priority); Group III (58 compounds with moderate priority)”, where “37” should be “36” and “58” should be “59”; and “The 37 compounds included in the high-priority group II are detailed in Table 2” where “37” should be “36”.

(4) In Section 3.8 Priority control recommendation, “Routine monitoring, derivation of environmental quality standards, and development of control strategies are recommended for the 20 priority control EOCs listed in priority group I/uncertain Category 1 and priority group II/uncertain Category 1” where “20” should be “19”; and “If feasible, special attention should be also paid to the 27 EOCs in priority Group III/uncertain Category 1 and priority Group IV/uncertain Category 1” where “27” should be “28.”

(5) In the Conclusions, “RQ analysis identified six EOCs with human health effects and 94 EOCs with ecotoxicity concerns. Four EOCs, namely 17 α -ethinylestradiol, disulfoton, estriol, and estrone, posed risks to both human and ecological health. A list of 11 top-priority compounds and 37 high-priority compounds was generated from the priority index.” should be corrected to

DOI of original article: <https://doi.org/10.1016/j.eng.2020.12.023>

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“RQ analysis identified five EOCs with human health effects and 94 EOCs with ecotoxicity concerns. Three EOCs, namely 17 α -ethinylestradiol, estriol, and estrone, posed risks to both human and ecological health. A list of the 11 top-priority and 36 high-priority compounds was generated from the priority index.”; and “Ultimately, 20 EOCs are recommended as priority compounds based on their classification in priority group I/uncertain Category 1 and priority group II/uncertain Category 1 with sufficient occurrence and toxicity data are recommended for priority control EOCs” where “20” should be “19.”

The authors sincerely apologize for any inconvenience that may have been caused by these errors.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.eng.2022.09.001>.

References

- [1] Murray KE, Thomas SM, Bodour AA. Prioritizing research for trace pollutants and emerging contaminants in the freshwater environment. *Environ Pollut* 2010;158(12):3462–71.
- [2] Blanset DL, Zhang J, Robson MG. Probabilistic estimates of lifetime daily doses from consumption of drinking water containing trace levels of *N,N*-diethylmeta-toluamide (DEET), triclosan, or acetaminophen and the associated risk to human health. *Hum Ecol Risk Assess* 2007;13(3):615–31.