

Supplementary Information
to manuscript STOTEN-D-22-20505

Hotspots of geogenic arsenic and manganese contamination in groundwater of the floodplains in lowland Amazonia (South America)

de Meyer Caroline M.C.^{a,1,*}, Wahnfried Ingo^b, Rodriguez Rodriguez Juan M.^c, Kipfer Rolf^{a,d}, García Avelino Pilar A.^c, Carpio Deza Edward A.^c, Berg Michael^{a*}

^a Eawag, Swiss Federal Institute of Aquatic Science and Technology, 8600 Dübendorf, Switzerland

^b UFAM, Universidade Federal do Amazonas, Manaus, Brazil

^c Facultad de Ciencias, Universidad Nacional de Ingeniería, Lima, Peru

^d Institute of Biogeochemistry and Pollutant Dynamics and Institute of Geochemistry and Petrology, ETH Zurich, 8092 Zurich, Switzerland

¹ present address: Soil Science Unit, Institute of Geography, University of Bern, 3012 Bern, Switzerland

* corresponding authors: demeyerc.caroline@gmail.com (C. de Meyer); michael.berg@eawag.ch (M. Berg)

Contents:

- Figure S.I.1 Eh-pH diagram with indication of the arsenic (a), respectively manganese (b) concentration of the groundwaters and surface waters of all three studied regions.
- Table S.I.1 Overview of the location and timing of the sampling campaigns for this study.
- Table S.I.2 Table with all results (in a separate Excel-file)

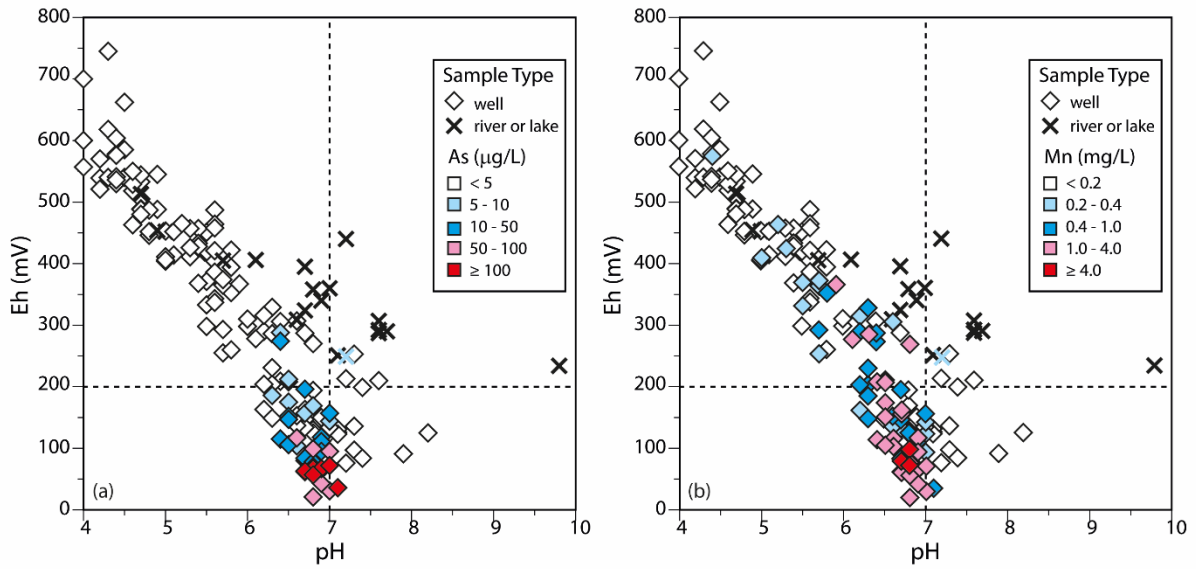


Fig. S.I.1: Eh-pH diagram with indication of the arsenic (a), respectively manganese (b) concentration of the groundwaters and surface waters of all three studied regions.

Study region	Rivers	Timing of sampling and corresponding river level
(A) "Ucamara depression" Western Amazonas (Peru)	Ucayali , Tapiche Marañon & Pastaza River	Early September 2017 End of low water river stage
(B) "central Madeira river" Southern Amazonas (Brazil)	Madeira River	May 2016 End of the rising stage
(C) "Solimões River" Central Amazonas (Brazil)	Amazon River (Solimões), Negro River, Purus River	May 2016 End of the rising stage
		Oct-Nov 2017 Start of the rising stage

Table S.I.1: Overview of the location and timing of the sampling campaigns for this study.

Table S.I.2: Table with all results (separate Excel-file)