

Supporting Information

Passive Sampling in Regulatory Chemical Monitoring of Nonpolar Organic Compounds in the Aquatic Environment

Kees Booij*¹, Craig D. Robinson², Robert M. Burgess³, Philipp Mayer⁴, Cindy A. Roberts⁵, Lutz Ahrens⁶, Ian J. Allan⁷, Jan Brant⁸, Lisa Jones⁹, Uta R. Kraus¹⁰, Martin M. Larsen¹¹, Peter Lepom¹², Jördis Petersen¹³, Daniel Pröfrock¹³, Patrick Roose¹⁴, Sabine Schäfer¹⁵, Foppe Smedes^{16,17}, Céline Tixier¹⁸, Katrin Vorkamp¹⁹, Paul Whitehouse²⁰

¹ NIOZ Royal Netherlands Institute for Sea Research, PO Box 59, 1790 AB Texel, The Netherlands

² Marine Scotland Science, Marine Laboratory, 375 Victoria Road, Aberdeen AB30 1AD, UK

³ U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division, 27 Tarzwell Drive, Narragansett, RI 02882, USA

⁴ Department of Environmental Engineering, Technical University of Denmark, Anker Engelunds Vej 1, DK-2800 Kongens Lyngby, Denmark

⁵ U.S. Environmental Protection Agency, Office of Research and Development, 1200 Pennsylvania Avenue, N.W., Washington, DC 20460, USA

⁶ Department of Aquatic Sciences and Assessment, Swedish University of Agricultural Sciences (SLU), Box 7050, SE-750 07 Uppsala, Sweden

⁷ Norwegian Institute for Water Research (NIVA), Gaustadalleen 21, NO-0349 Oslo, Norway

⁸ Centre for Environment, Fisheries and Aquaculture Science, Pakefield Road, Lowestoft, Suffolk NR33 0HT UK

⁹ Dublin City University, Glasnevin, Dublin, Ireland

¹⁰ Federal Maritime and Hydrographic Agency, Wuestland 2, 22589 Hamburg, Germany

¹¹ Aarhus University, Department of Bioscience, Frederiksborgvej 399, 4000 Roskilde, Denmark

¹² Federal Environment Agency, Laboratory for Water Analysis, Bismarckplatz 1, 14193 Berlin, Germany

¹³ Helmholtz-Zentrum Geesthacht, Institute of Coastal Research, Department Marine Bioanalytical Chemistry, Max-Planck Str. 1, 21502 Geesthacht, Germany

¹⁴ Royal Belgian Institute of Natural Sciences, Operational Directorate Natural Environment, Gulledele 100, B-1200 Brussels, Belgium

¹⁵ Federal Institute of Hydrology, Am Mainzer Tor 1, 56068 Koblenz, Germany

¹⁶ Masaryk University, RECETOX, Kamenice 753/5, 62500 Brno, Czech Republic

¹⁷ Deltares, P.O. Box 85467, 3508 AL Utrecht, The Netherlands

¹⁸ Ifremer, Unit of Biogeochemistry and Ecotoxicology, Lab. Biogeochemistry of Organic Contaminants, BP 21105, 44311 Nantes Cedex 3, France

¹⁹ Aarhus University, Department of Environmental Science, Frederiksborgvej 399, 4000 Roskilde, Denmark

²⁰ Environment Agency, Evidence Directorate, Red Kite House, Howbery Park, OX10 8BD, United Kingdom

*Corresponding author e-mail kees.booij@nioz.nl; tel. +31 222 369 463; fax +31 222 319 674

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Number of tables: 1

Supporting Information Contents

Table S1. Types and configurations of passive samplers for nonpolar organic contaminants.....S3

References.....S4

Table S1. Types and configurations of passive samplers for nonpolar organic contaminants ($\log K_{ow} > 4$). The list of sampler types and target compounds is not exhaustive.

Sampler type	Configuration	Target contaminants ^a	references
Chemcatcher	1-octanol loaded C18 extraction disk covered with LDPE membrane	PCBs, PAHs	1-5
Low-density polyethylene (LDPE)	25-200 μm polymer sheets	PCBs, PAHs, OCPs, PCDD/Fs, PBDEs, organophosphates, triclosan, alkylphenols, polycyclic musks	1,2,6-15
Membrane-Enclosed Sorptive Coating (MESCO)	silicone rod enclosed within a water-filled LDPE membrane	PCBs, OCPs, PAHs	2,16-18
Silicones	25-500 μm sheets, fibers, or wall coatings of poly(dimethylsiloxane) or related polymers	PCBs, PAHs, OCPs, PCDD/Fs, PBDEs, organophosphates, triclosan, pyrethroids, chlorobenzenes, alcohol ethoxylates, cyclic methylsiloxanes, polycyclic musks, oxadiazon	1,2,7,10-12,15,19-27
Poly(oxymethylene) (POM)	20-80 μm polymer sheets	PCBs, PAHs, OCPs, PCDD/Fs, PBDEs, triclosan, trifluralin	11,12,28-30
Semi-permeable membrane device (SPMD)	triolein enclosed within an 75-90 μm LDPE membrane	PCBs, PAHs, OCPs, PCDD/Fs, PBDEs, organophosphates, trifluralin, pyrethroids, oxadiazon, alkylphenols, carbazoles	1,2,27,31-35
Ceramic dosimeters	various sorbents enclosed within a ceramic membrane	PAHs, PCDD/Fs, PBDEs, organophosphates	36-39
Trioilin-embedded cellulose acetate membrane	blend of cellulose acetate and trioilin, 50 μm thickness	PAHs, OCPs	40-42
Poly(ethylene-co-vinylacetate) (EVA)	EVA impregnated glass fiber filter	PCBs, OCPs, organophosphates, trifluralin, pyrethroids, chlorobenzenes	43-45

^a PCBs = polychlorinated biphenyls, PAHs = polycyclic aromatic hydrocarbons, OCPs = organochlorine pesticides, PBDEs = polybrominated diphenyl ethers, PCDD/Fs = polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans

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