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Supplementary information for: Occurrence of organochlorine pesticides in indoor dust

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ABBREVIATIONS:

DDT, dichlordiphenyltrichlorethane

HCH, hexachlorocyclohexane

HCB, hexachlorobenzene

TNC, *trans*-nonachlor

NERI, National Environment Research Institute

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MATERIALS AND METHODS

Organochlorine Pesticide Analyses in dust

The samples were analysed in one batch at the National Environment Research Institute (NERI), within three months after the first dust sample was taken. The dust samples were spiked with the recovery standards PCB-3, PCB-40 and PCB-198 (purity 99%, CIL, Cambridge, UK) prior to Soxhlet extraction using glass-distilled *n*-hexane: acetone (4:1) (both Rathburn, Walkerburn, Scotland). Clean up and evaporative concentration of the extracts followed the previously reported procedure.¹

The analytical method for polychlorinated biphenyls at the NERI also included the organochlorine pesticides DDTs (*p,p'*-DDT, *p,p'*-DDE, *p,p'*-DDD, *o,p'*-DDT and *o,p'*-DDE), HCB, HCH (α -, β - and γ -HCH) and TNC. PCBs and organochlorine pesticides were analysed using dual column GC with electron capture detection. The results in the present paper will be limited to the measurements of organochlorine pesticides.

Each sample batch included 1-3 procedural blanks and one sample of the in-house reference material (sand lance oil). The results of the internal reference material were plotted in control charts with warning and action limits (two and three times the standard deviation of the target value, respectively). The overall quality and performance of the analytical method was confirmed by regular participation in the QUASIMEME proficiency testing scheme. All recoveries were between 85% and 112% for PCB-40 and concentrations were not corrected for recoveries.

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Reference List

1. Vorkamp K, Christensen JH, Glasius M *et al.* Persistent halogenated compounds in black guillemots (*Cepphus grylle*) from Greenland--levels, compound patterns and spatial trends. *Mar.Pollut.Bull.* 2004; **48**: 111-21.