

Supporting Information

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TITLE: Occurrence of emerging contaminants in pet hair and indoor air: Integrative health risk assessment using multiple ToxCast endpoints

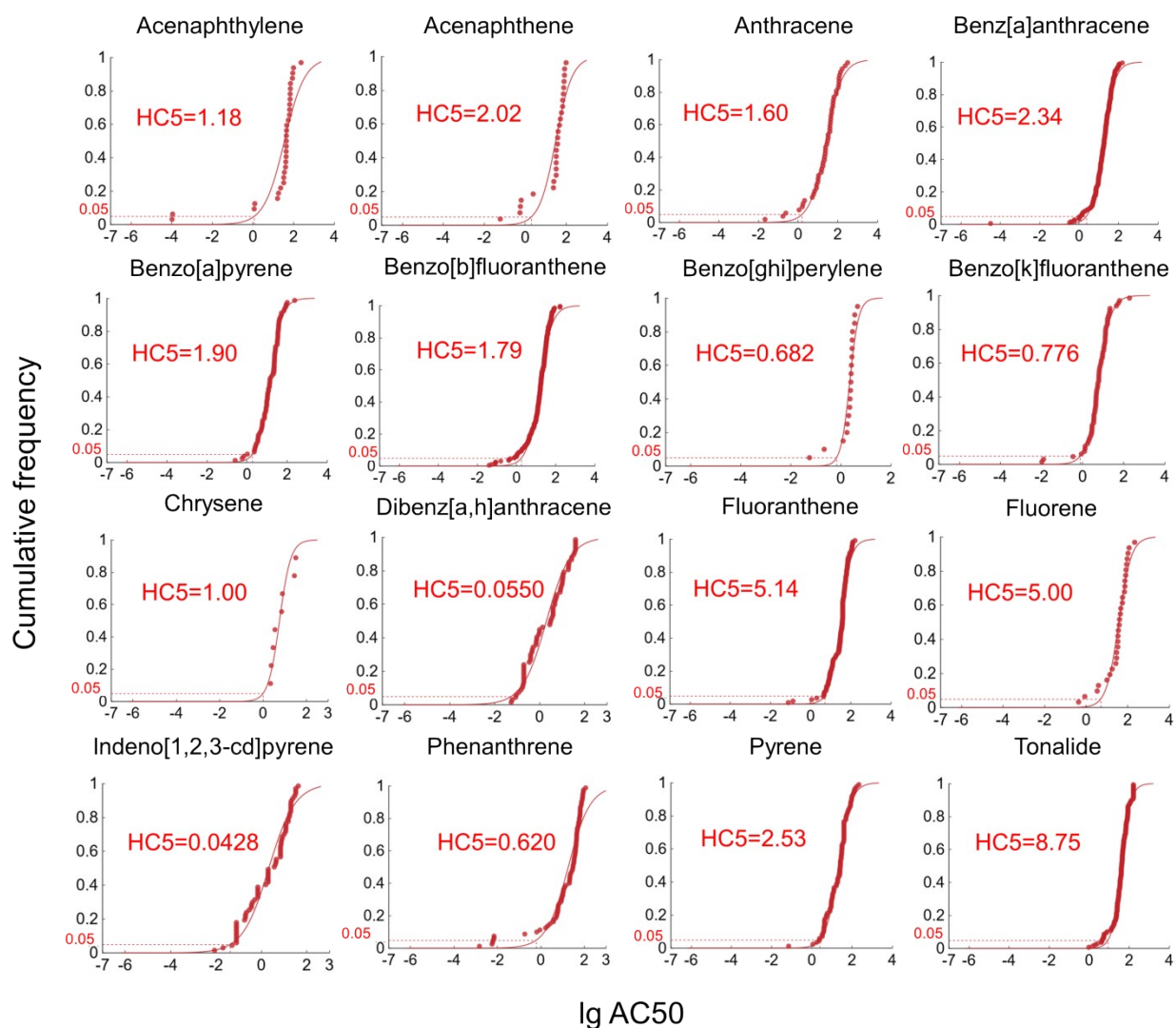
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FIGURES: 3

TABLES: 18

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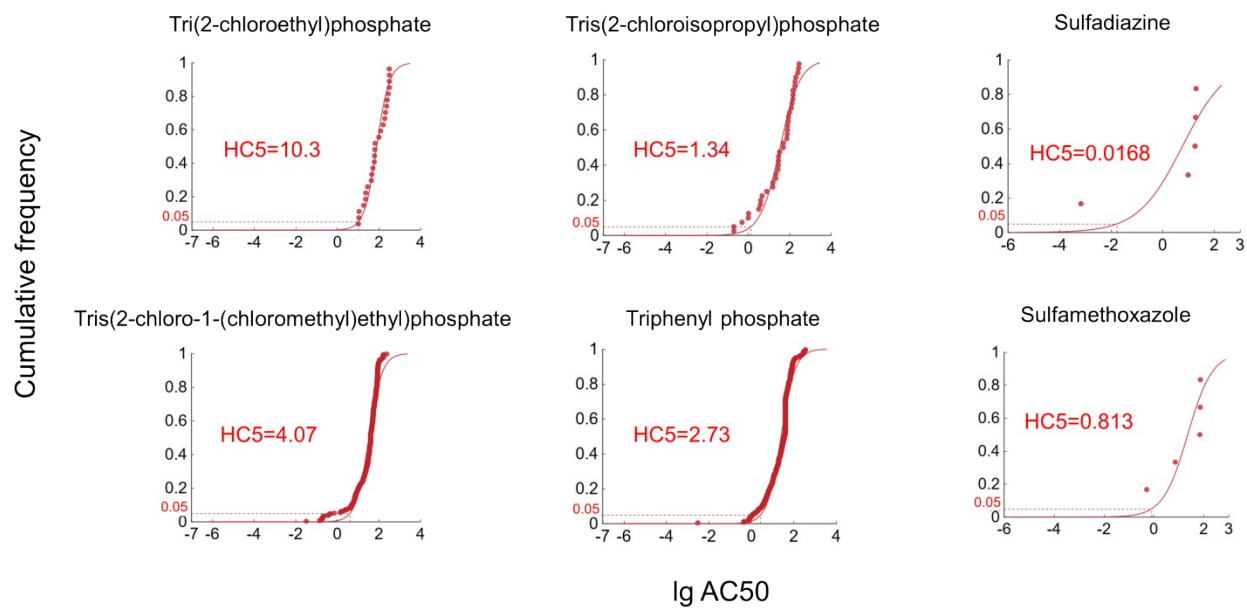
15 Figure S1. Estimated 5% hazard concentrations (HC₅, μmol/L) of polycyclic aromatic

16 hydrocarbons (PAHs) and polycyclic musks (PCMs). The horizontal coordinate represents the

17 median activity concentration (AC₅₀) and the vertical coordinate is the percentiles of individual

18 toxicity endpoints for the chemical from the ToxCast.

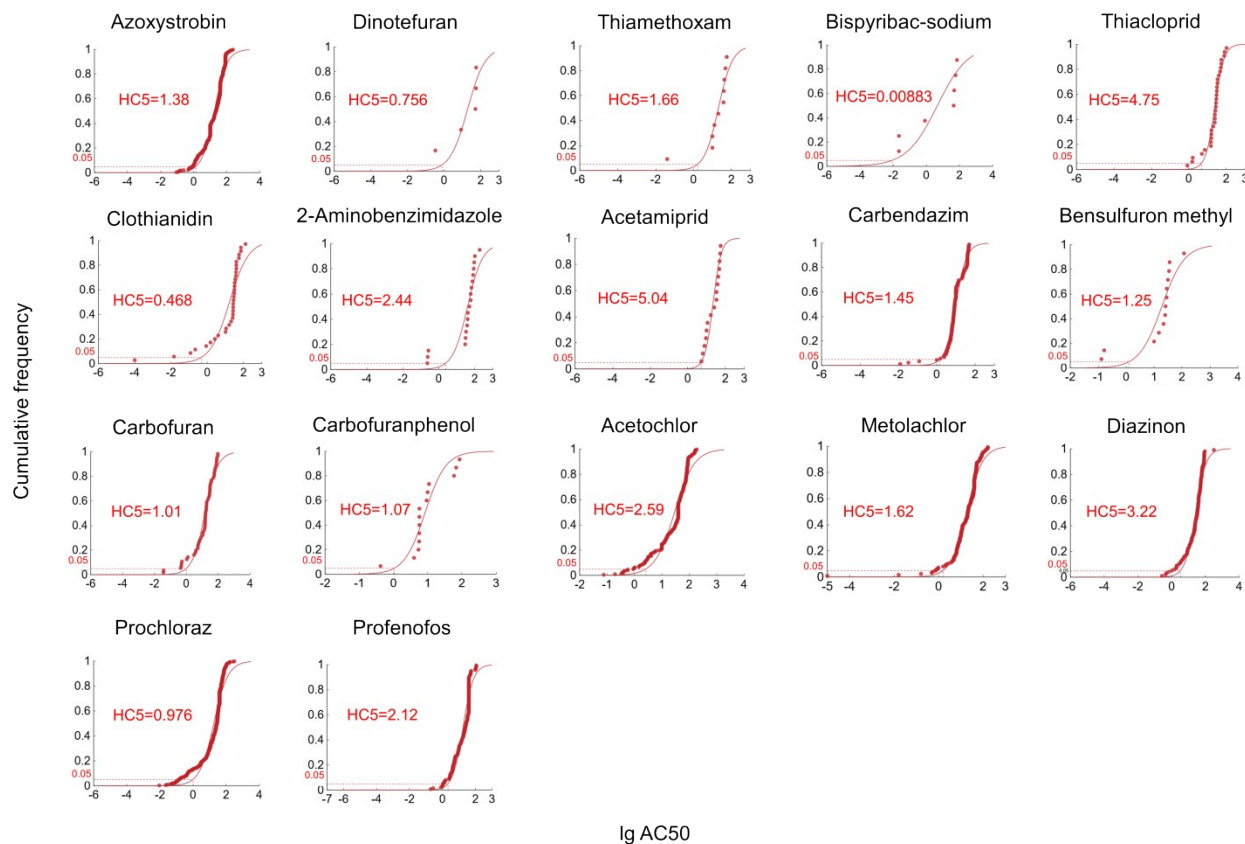
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21 Figure S2. Estimated 5% hazard concentrations (HC_5 , $\mu\text{mol/L}$) of organophosphate esters (OPEs)
 22 and antibiotics. The horizontal coordinate represents the median activity concentration (AC_{50})
 23 and the vertical coordinate is the percentiles of individual toxicity endpoints for the chemical
 24 from the ToxCast.

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lg AC50

27 Figure S3. Estimated 5% hazard concentrations (HC₅, $\mu\text{mol/L}$) of current use pesticides (CUPs).

28 The horizontal coordinate represents the median activity concentration (AC₅₀) and the vertical

29 coordinate is the percentiles of individual toxicity endpoints for the chemical from the ToxCast.

30 Table S1. Physicochemical properties of target analytes, including polycyclic aromatic
31 hydrocarbon (PAHs), organophosphate esters (OPEs), polycyclic musks (PCMs), antibiotics, and
32 current-use pesticides (CUPs).

Class	Compound	Formula	Molecular mass	Log K_{ow} ^a
PAHs	Acenaphthene	C ₁₂ H ₁₀	154.2	3.92
	Acenaphthylene	C ₁₂ H ₈	152.2	3.94
	Fluorene	C ₁₃ H ₁₀	166.2	4.18
	Anthracene	C ₁₄ H ₁₀	178.2	4.45
	Phenanthrene	C ₁₄ H ₁₀	178.2	4.46
	Fluoranthene	C ₁₆ H ₁₀	202.3	5.16
	Pyrene	C ₁₆ H ₁₀	202.3	4.88
	Benz[a]anthracene	C ₁₈ H ₁₂	228.3	5.60
	Benzo[b]fluoranthene	C ₂₀ H ₁₂	252.3	5.78
	Chrysene	C ₁₈ H ₁₂	228.3	5.81
	Benzo[k]fluoranthene	C ₂₀ H ₁₂	252.3	6.11
	Benzo[a]pyrene	C ₂₀ H ₁₂	252.3	6.13
	Dibenz[a,h]anthracene	C ₂₂ H ₁₄	278.4	6.63
	Benzo[ghi]perylene	C ₂₂ H ₁₂	276.3	6.63
	Indeno[1,2,3-cd]pyrene	C ₂₂ H ₁₂	276.3	6.74
OPEs	Tris(2-chloroethyl)phosphate (TCEP)	C ₆ H ₁₂ Cl ₃ O ₄ P	285.5	1.44
	Tris(2-chloroisopropyl) phosphate (TCPP)	C ₉ H ₁₈ Cl ₃ O ₄ P	327.6	2.59
	Tris(2,3-dichloropropyl) phosphate (TDCP)	C ₉ H ₁₅ Cl ₆ O ₄ P	430.9	3.65
	Triphenyl phosphate (TPHP)	C ₁₈ H ₁₅ O ₄ P	326.3	4.59
PCMs	Tonalide	C ₁₈ H ₂₆ O	258.4	5.70
	Galaxolide	C ₁₈ H ₂₆ O	258.4	5.90
Antibiotics	Sulfadiazine	C ₁₀ H ₁₀ N ₄ O ₂ S	250.3	-0.154
	Sulfapyridine	C ₁₁ H ₁₁ N ₃ O ₂ S	249.3	0.35
	Sulfamethoxazole	C ₁₀ H ₁₁ N ₃ O ₃ S	253.3	0.726
CUPs	Azoxystrobin	C ₂₂ H ₁₇ N ₃ O ₅	403.4	-0.93
	Dinotefuran	C ₇ H ₁₄ N ₄ O ₃	202.2	-0.492

Thiamethoxam	C ₈ H ₁₀ ClN ₅ O ₃ S	291.7	-0.201
Bispyribac-sodium	C ₁₉ H ₁₇ N ₄ NaO ₈	452.4	0.229
Thiacloprid	C ₁₀ H ₉ ClN ₄ S	252.7	0.02
Clothianidin	C ₆ H ₈ ClN ₅ O ₂ S	249.7	0.29
2-Aminobenzimidazole	C ₇ H ₇ N ₃	133.2	0.91
Acetamiprid	C ₁₀ H ₁₁ ClN ₄	222.7	1.51
Carbendazim	C ₉ H ₉ N ₃ O ₂	191.2	1.55
Bensulfuron methyl	C ₁₆ H ₁₈ N ₄ O ₇ S	410.4	2.01
Carbofuran	C ₁₂ H ₁₅ NO ₃	221.3	2.06
Carbofuranphenol	C ₁₀ H ₁₂ O ₂	164.2	2.39
Acetochlor	C ₁₄ H ₂₀ ClNO ₂	269.8	3.03
Metolachlor	C ₁₅ H ₂₂ ClNO ₂	283.8	3.15
Diazinon	C ₁₂ H ₂₁ N ₂ O ₃ PS	304.3	3.81
Prochloraz	C ₁₅ H ₁₆ Cl ₃ N ₃ O ₂	376.6	4.07
Profenofos	C ₁₁ H ₁₅ BrClO ₃ PS	373.6	4.68

33 ^a Octanol-water partitioning coefficients (log K_{ow}) were collected from the CompTox Chemicals

34 Dashboard (<https://comptox.epa.gov>) (last time accessed: 2022.11.25).

35 Table S2. Details about the pet hair, indoor air and indoor dust samples collected in the present study.

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Pet	Species	Frequency of pet bathing	Frequency of room cleaning	Area of active range (m ²)	Sampling location
1 dog	Toypoodle	Once a week	\	60–100	Qingjiangpu District, Huai'an, Jiangsu, East China
1 dog	Japanese Spitz	Once a week	Once a day	60–100	Huaiyin District, Huai'an, Jiangsu, East China
2 cats	British Shorthair, Ragdoll	\	Once a day	\	Qingjiangpu District, Huai'an, Jiangsu, East China
1 dog	Yorkshire Terrier	Once a week	Once a week	20–60	Shapingba District, Chongqing, Southwest China
2 cats	American Shorthair	Once every six months	Once a week	60–100	Liangqing District, Nanning, Guangxi, Southwest China
1 dog	Welsh Corgi	Once a week	Once a week	60–100	Siming District, Xiamen, Fujian, Southeast China
1 dog	Poodle	Once a week	Once a week	20–60	Panyu District, Guangzhou, Guangdong, Southeast China
2 cats	Longhair Scottish Fold, Ragdoll	Once every six months	Once a day	20–60	Guangzhou, Guangdong, Southeast China
2 cats	American Shorthair, Ragdoll	\	Once a week	\	Panyu District, Guangzhou, Guangdong, Southeast China
2 cats	British Shorthair	\	Once a day	20–60	Raping County, Chaozhou, Guangdong, Southeast China

38 Table S3. Instrumental parameters for gas chromatography-mass spectrometry (GC-MS) for analyzing polycyclic aromatic
 39 hydrocarbons (PAHs), polycyclic musks (PCMs), and organophosphate esters (OPE) and their surrogate and internal standards.

Class	Compound	Quantitative ion (m/z)	Qualitative ions (m/z)		Retention time (min)	Calibration range (ng/mL)	Linearity (r^2)
PAHs	Acenaphthene	153	153	154	7.120	1–200	0.997
	Acenaphthylene	152	151	150	6.905	1–200	0.996
	Fluorene	166	165	163	7.755	1–200	0.997
	Anthracene	178	176	179	9.010	1–200	0.999
	Phenanthrene	178	176	179	8.940	1–200	0.997
	Fluoranthene	202	200	203	10.540	1–200	0.997
	Pyrene	202	200	203	10.935	1–200	0.997
	Benz[a]anthracene	228	226	229	13.545	1–200	0.997
	Benzo[b]fluoranthene	252	250	253	16.035	1–200	0.998
	Chrysene	252	250	253	13.525	1–200	0.997
	Benzo[k]fluoranthene	252	250	253	16.005	1–200	0.997
	Benzo[a]pyrene	252	250	253	16.750	1–200	0.997
	Dibenz[a,h]anthracene	278	276	279	21.310	1–200	0.997
	Benzo[ghi]perylene	276	138	274	20.410	1–200	0.998
	Indeno[1,2,3-cd]pyrene	276	274	277	21.481	1–200	0.997
OPEs	TCEP ^a	249	63	143	12.040	1–200	0.998
	TCPP ^a	125	99	157	13.500	1–200	0.997
	TDCP ^a	75	99	191	15.660	1–200	0.998
	TPHP ^a	326	325	77	16.250	1–200	0.998
PCMs	Galaxolide	243	213	55	12.330	1–500	0.999
	Tonalide	243	187	258	12.405	1–500	0.999
Surrogate	Naphthalene-d ₈	136	108	137	4.880	1–200	0.997

standards	Acenaphthene-d ₁₀	164	162	160	7.035	1–200	0.997
	Phenanthrene-d ₁₀	188	189	184	8.895	1–200	0.997
	Chrysene-d ₁₂	240	241	236	13.570	1–200	0.998
	Perylene-d ₁₂	264	260	265	17.045	1–200	0.998
	TPHP-d ₁₅ ^a	341	82	80	16.120	1–200	0.997
	DBOFB ^b	456	296	454	10.345	1–200	0.996
Internal standards	2-Fluoro-1,1'-biphenyl	172	171	170	6.245		
	<i>p</i> -Terphenyl-d ₁₄	244	243	245	11.190		
	Dibenzo(a,h)anthracene-d ₁₄	292	293	288	20.225		
	TnBP-d ₂₇ ^a	103	167	231	9.920		
	Tonalide-d ₃	246	190	261	12.410	□	□

40 ^a Abbreviations of OPEs are as follows: tris(2-chloroethyl) phosphate (TCEP), tris(2-chloroisopropyl) phosphate (TCPP), tris(2,3-
41 dichloropropyl) phosphate (TDCP), tri-phenyl phosphate (TPHP) and tri-n-butyl phosphate (TnBP).

42 ^b The DBOFB is 4,4'-dibromooctafluorobiphenyl.

43 Table S4. Parameters for high-performance liquid chromatography-tandem mass spectrometry (HPLC-MS/MS) for analyzing
 44 antibiotics and current-use pesticides (CUPs) and the surrogate and internal standards.

Class	Compound	Retention time (min)	Ionization mode	Transition mass (m/z)	Declustering Potential (V)	Collision energy (eV)	Calibration range (ng/mL)	Linearity (r ²)
Antibiotics	Sulfadiazine	10.0	Positive	251.1 → 155.8 ^a	12	23	0.1–50	0.997
	Sulfamethoxazole	10.0	Positive	254.1 → 156.1 ^a	100	21	0.1–50	0.996
	Sulfapyridine	10.0	Positive	250.1 → 155.9 ^a	80	22	0.1–50	0.998
CUPs	Acetochlor	4.10	Positive	270.1 → 224.0 ^a	40	15	0.1–20	0.996
				270.1 → 148.1 ^b	40	27		
	Bensulfuron methyl	3.55	Positive	411.0 → 149.0 ^a	40	27	0.1–20	0.993
				411.0 → 182.0 ^b	40	26		
	Bispyribac-sodium	3.62	Positive	453.0 → 297.0 ^a	20	24	0.1–20	0.991
				453.0 → 179.1 ^b	130	47		
	Carbofuran	3.40	Positive	222.1 → 165.1 ^a	60	17	0.1–20	0.993
				222.1 → 123.1 ^b	60	30		
	Carbofuranphenol	3.41	Positive	165.1 → 123.0 ^a	40	18	0.1–20	0.992
				165.1 → 137.0 ^b	40	16		
	Metolachlor	4.12	Positive	284.1 → 252.2 ^a	50	20	0.1–20	0.991
				284.1 → 176.0 ^b	50	35		
	2-Aminobenzimidazole	1.85	Positive	134.0 → 107.0 ^a	120	31	0.5–100	0.997
				134.0 → 117.0 ^b	120	32		
	Azoxystrobin	3.78	Positive	404.4 → 372.0 ^a	60	19	0.1–20	0.996
				404.4 → 344.0 ^b	60	34		
	Carbendazim	2.34	Positive	191.6 → 160.1 ^a	60	25	0.1–100	0.994
				191.6 → 132.1 ^b	60	42		
	Prochloraz	3.88	Positive	378.0 → 309.9 ^a	40	16	0.01–10	0.997
				378.0 → 70.1 ^b	40	31		

	Acetamiprid	2.93	Positive	223.3 → 126.0 ^a	60	30	0.1–50	0.997
				223.3 → 98.9 ^b	60	51		
	Clothianidin	2.81	Positive	250.0 → 169.0 ^a	50	19	0.1–100	0.996
				250.0 → 131.9 ^b	50	23		
	Dinotefuran	2.23	Positive	203.1 → 129.1 ^a	50	16	0.5–100	0.996
				203.1 → 114.0 ^b	50	17		
	Thiacloprid	3.09	Positive	253.0 → 126.0 ^a	50	30	0.1–50	0.998
				253.0 → 186.0 ^b	50	20		
	Thiamethoxam	2.68	Positive	292.2 → 211.1 ^a	50	18	0.1–20	0.999
				292.2 → 132.0 ^b	50	30		
	Diazinon	4.37	Positive	305.0 → 169.0 ^a	70	27	0.01–50	0.983
				305.0 → 153.0 ^b	70	27		
	Profenofos	4.55	Positive	373.0 → 303.0 ^a	60	26	0.01–50	0.998
				373.0 → 97.0 ^b	60	43		
Surrogate standards	Acetamiprid- <i>d</i> ₃	2.92	Positive	226.3 → 126.0 ^a	70	28	0.1–20	0.995
				226.3 → 89.9 ^b	70	45		
	Sulfamethoxazole- <i>d</i> ₄	7.16	Positive	258.0 → 160.0 ^a	90	20	0.1–50	0.993
	Roxithromycin- <i>d</i> ₇	8.79	Positive	844.5 → 686.5 ^a	30	31	0.1–50	0.992
Internal standards	Chloramphenicol- <i>d</i> ₅	7.56	Negative	326.0 → 157.1 ^a	-140	-26		
	Imidacloprid- <i>d</i> ₄	2.88	Positive	260.3 → 179.1 ^a	50	20		
				260.3 → 213.0 ^b	50	27		

45 ^a) MS/MS transition used for quantification.

46 ^b) MS/MS transition used for qualification.

Table S5. Log K_{oa} and the five Abraham's solute descriptors (polarizability S, hydrogen bonding acidity A, hydrogen bonding basicity B, molar volume V, and hexadecane/air partition coefficient L) for individual polycyclic aromatic hydrocarbons (PAHs), organophosphate esters (OPEs), polycyclic musks (PCMs), antibiotics, and current use pesticides (CUPs).

Class	Compound	CAS No.	log K_{oa}	S	A	B	V	L
PAHs	Acenaphthene	83-32-9	6.52 ^a	1.05 ^c	0 ^c	0.22 ^c	1.2586 ^c	6.469 ^c
	Acenaphthylene	208-96-8	6.34 ^a	1.14 ^c	0 ^c	0.26 ^c	1.2156 ^c	6.175 ^c
	Fluorene	86-73-7	6.9 ^a	1.06 ^c	0 ^c	0.25 ^c	1.3565 ^c	6.922 ^c
	Anthracene	120-12-7	7.71 ^a	1.34 ^c	0 ^c	0.28 ^c	1.4544 ^c	7.568 ^c
	Phenanthrene	85-01-8	7.68 ^a	1.29 ^c	0 ^c	0.26 ^c	1.4544 ^c	7.632 ^c
	Fluoranthene	206-44-0	8.76 ^a	1.55 ^c	0 ^c	0.24 ^c	1.5846 ^c	8.827 ^c
	Pyrene	129-00-0	8.81 ^a	1.71 ^c	0 ^c	0.28 ^c	1.5846 ^c	8.833 ^c
	Benz[a]anthracene	56-55-3	10.28 ^a	1.70 ^c	0 ^c	0.35 ^c	1.8234 ^c	10.291 ^c
	Benzo[b]fluoranthene	205-99-2	11.34 ^a	1.82 ^c	0 ^c	0.4 ^c	1.9536 ^c	11.632 ^c
	Chrysene	218-01-9	10.3 ^a	1.73 ^c	0 ^c	0.33 ^c	1.8234 ^c	10.334 ^c
	Benzo[k]fluoranthene	207-08-9	11.37 ^a	1.91 ^c	0 ^c	0.33 ^c	1.9536 ^c	11.607 ^c
	Benzo[a]pyrene	50-32-8	11.56 ^a	1.98 ^c	0 ^c	0.44 ^c	1.9536 ^c	11.736 ^c
	Dibenz[a,h]anthracene	53-70-3	12.59 ^a	2.04 ^c	0 ^c	0.44 ^c	2.1924 ^c	12.96 ^c
	Benzo[ghi]perylene	191-24-2	12.55 ^a	1.90 ^c	0 ^c	0.45 ^c	2.0838 ^c	13.264 ^c
	Indeno[1,2,3-cd]pyrene	193-39-5	12.43 ^a	1.93 ^c	0 ^c	0.42 ^c	2.0838 ^c	12.699 ^c
OPEs	Tris(2-chloroethyl)phosphate (TCEP)	115-96-8	7.98 ^a	2.09 ^c	0.03 ^c	0.98 ^c	1.7606 ^c	7.18 ^c
	Tris(2-chloroisopropyl) phosphate (TCPP)	13674-84-5	9.68 ^a	1.09 ^c	0 ^c	1.32 ^c	2.1833 ^c	8.704 ^c
	Tris(2,3-dichloropropyl) phosphate (TDCP)	78-43-3	10.6 ^a	1.97 ^d	0 ^d	0.88 ^d	2.5505 ^d	9.975 ^d
	Triphenyl phosphate (TPHP)	115-86-6	10.9 ^a	1.66 ^c	0 ^c	1.10 ^c	2.3714 ^c	11.259 ^c
PCMs	Tonalide	21145-77-7	7.78 ^b	1.06 ^d	0 ^d	0.68 ^d	2.3143 ^d	8.671 ^d
	Galaxolide	1222-05-5	6.13 ^b	1.15 ^c	0 ^c	0.63 ^c	2.2487 ^c	9.476 ^c
Antibiotics	Sulfadiazine	68-35-9	8.10 ^b	2.55 ^c	0.65 ^c	1.37 ^c	1.7225 ^c	10.504 ^c
	Sulfapyridine	144-83-2	11.71 ^b	2.23 ^c	0.59 ^c	1.48 ^c	1.7636 ^c	10.27 ^c

CUPs	Sulfamethoxazole	723-46-6	11.30 ^b	2.23 ^c	0.58 ^c	1.29 ^c	1.7244 ^c	9.76
	Azoxystrobin	131860-33-8	14.05 ^b	2.01 ^c	0 ^c	2.30 ^c	2.9165 ^c	14.84 ^c
	Dinotefuran	165252-70-0	11.68 ^b	1.39 ^d	0.37 ^d	1.45 ^d	1.4756 ^d	6.635 ^d
	Thiamethoxam	153719-23-4	13.35 ^b	1.57 ^c	0 ^c	1.84 ^c	1.8076 ^c	9.092 ^c
	Bispyribac-sodium	125401-92-5	/ ^f	/ ^f	/ ^f	/ ^f	/ ^f	/ ^f
	Thiacloprid	111988-49-9	10.33 ^b	2.11 ^d	0.05 ^d	1.37 ^d	1.7275 ^d	9.053 ^d
	Clothianidin	210880-92-5	14.40 ^b	2.21 ^c	0.86 ^c	0.75 ^c	1.5757 ^c	9.495 ^c
	2-Aminobenzimidazole	934-32-7	9.19 ^b	1.42 ^d	0.73 ^d	0.72 ^d	1.0051 ^d	6.528 ^d
	Acetamiprid	135410-20-7	8.10 ^b	1.57 ^d	0.05 ^d	1.21 ^d	1.6726 ^d	7.51 ^d
	Carbendazim	10605-21-7	10.60 ^e	1.45 ^c	0.45 ^c	1.00 ^c	1.3613 ^c	7.985 ^c
	Bensulfuron methyl	83055-99-6	15.26 ^b	2.61 ^d	0.55 ^d	2.26 ^d	2.7754 ^d	13.492 ^d
	Carbofuran	1563-66-2	9.22 ^b	1.08 ^c	0.21 ^c	1.10 ^c	1.6861 ^c	7.45 ^c
	Carbofuranphenol	1563-38-8	8.02 ^b	0.95 ^d	0.41 ^d	0.53 ^d	1.2888 ^d	5.68 ^d
	Acetochlor	34256-82-1	9.07 ^b	1.30 ^c	0 ^c	1.30 ^c	2.1402 ^c	9.25 ^c
	Metolachlor	51218-45-2	9.33 ^b	1.53 ^c	0 ^c	1.25 ^c	2.2811 ^c	9.35 ^c
	Diazinon	333-41-5	9.15 ^b	0.81 ^c	0.06 ^c	1.18 ^c	2.3056 ^c	8.001 ^c
	Prochloraz	67747-09-5	10.27 ^b	1.87 ^d	0 ^d	1.51 ^d	2.5309 ^d	11.59 ^c
	Profenofos	41198-08-7	10.72 ^b	1.25 ^d	0 ^d	0.92 ^d	2.2625 ^c	9.52 ^c

^a $\log K_{oa}$ values of PAHs are from ^{1,2}, while $\log K_{oa}$ values of OPEs are from ³.

^b $\log K_{oa}$ values are from Chemspider (<http://www.chemspider.com/>).

^c The solute descriptors were obtained from the UFZ-LSER database ⁴.

^d The solute descriptors were calculated with Quantitative structure property relationships (QSPRs) from the UFZ-LSER database ⁴.

^e $\log K_{oa}$ value of carbendazim is from ⁵.

^f Not available.

47 Table S6. The minimum (Min), maximum (Max), mean, standard deviation (SD), and median of the concentrations of individual
 48 polycyclic aromatic hydrocarbons (PAHs), organophosphate esters (OPEs), and polycyclic musks (PCMs) in indoor air, pet hair, and
 49 dust samples.

Compound	Air (ng/m ³)					Pet hair (ng/g dw)					Dust (ng/g dw)				
	Min	Max	Mean	SD	Median	Min	Max	Mean	SD	Median	Min	Max	Mean	SD	Median
Acenaphthylene	0.83	15.8	5.47	4.44	4.10	14.1	33.9	23.5	7.70	26.8	4.97	107	40.7	30.6	43.9
Acenaphthene	2.90	22.6	13.2	5.60	14.9	3.26	41.8	25.3	12.8	24.3	3.63	92.7	30.3	27.1	24.1
Fluorene	7.66	47.6	31.1	13.9	31.0	10.9	63.2	39.5	14.6	43.8	0.71	38.6	15.7	12.9	17.5
Phenanthrene	58.1	139	84.6	23.2	82.6	12.0	196	100	42.3	98.6	19.5	200	118	65.7	134
Anthracene	5.05	12.4	7.79	2.08	8.10	3.26	41.3	15.1	11.7	12.5	5.69	152	50.1	49.1	30.5
Fluoranthene	8.58	16.5	10.7	2.35	10.3	3.20	51.0	24.4	12.9	24.1	10.5	149	85.7	41.9	92.6
Pyrene	7.04	13.8	9.53	2.07	9.37	3.06	44.7	24.0	10.1	24.9	6.82	131	59.3	45.8	54.2
Benz[a]anthracene	0.39	1.50	0.67	0.36	0.51	1.93	8.29	3.76	2.43	2.57	2.46	77.4	24.0	24.7	17.0
Chrysene	0.98	2.46	1.44	0.42	1.43	2.02	16.5	8.11	4.13	7.50	6.53	143	58.9	43.0	53.3
Benzo[b]fluoranthene	0.44	2.03	1.38	0.62	1.53	3.29	10.5	6.09	2.10	5.75	1.27	82.7	30.3	27.6	22.8
Benzo[k]fluoranthene	0.26	1.21	0.81	0.27	0.85	1.94	3.53	2.67	0.60	2.74	1.49	55.9	21.8	18.4	19.5
Benzo[a]pyrene	0.29	1.33	0.74	0.32	0.73	3.75	15.6	9.00	4.68	7.10	1.52	61.2	30.6	22.0	31.4
Indeno[1,2,3-cd]pyrene	0.04	0.40	0.20	0.12	0.16	2.19	11.9	5.80	3.82	4.20	2.31	61.1	23.0	17.8	17.0
Dibenz[a,h]anthracene	0.11	1.75	0.55	0.56	0.30	ND	ND	ND	ND	ND	0.40	23.4	8.35	8.11	6.21
Benzo[ghi]perylene	0.02	0.30	0.15	0.07	0.14	ND	ND	ND	ND	ND	1.23	43.3	17.5	15.4	10.4
ΣPAHs	122	209	168	34.5	176	73.9	437	279	87.9	280	103	1055	614	303	631
TCEP ^a	3.18	28.1	12.8	6.97	11.0	13.1	849	236	263	158	13.1	720	224	213	165
T CPP ^b	0.72	9.08	4.86	2.25	4.52	2.87	46.0	9.68	10.9	6.26	1.43	79.3	14.5	23.2	6.45
TD CP ^c	4.17	26.1	11.7	6.75	10.3	31.2	240	109	70.2	74.8	54.2	3889	969	1291	321
TPHP ^d	3.37	156	23.8	46.7	9.90	40.3	316	104	79.9	69.7	17.3	964	270	297	190
ΣOPEs	23.1	198	53.2	52.1	37.5	186	1237	459	324	345	230	4578	1478	1457	840
Galaxolide	15.0	135	46.4	34.9	37.2	384	8333	2831	2458	1337	113	5292	1505	1560	1146
Tonalide	0.79	3.28	2.02	0.88	1.98	20.2	349	124	92.0	105	6.66	140	53.8	46.4	41.3
ΣPCMs	16.0	137	48.4	35.0	39.4	404	8407	2955	2550	1489	120	5406	1559	1598	1189

50 Organophosphate esters include:

51 ^a.Tri(2-chloroethyl)phosphate, ^b.Tris(2-chloroisopropyl)phosphate, ^c.Tris(2-chloro-1-(chloromethyl)ethyl)phosphate, ^d.Triphenyl phosphate .

52 Table S7. Detection frequencies (DF, %), reporting limits (RL), and concentrations (ng/m³) of
 53 individual polycyclic aromatic hydrocarbons (PAHs), organophosphate esters (OPEs), and
 54 polycyclic musks (PCMs) in indoor air.

Compound	DF (%)	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10
RL ^a (ng/m ³)		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Acenaphthylene	100	15.8	7.48	1.73	4.65	5.85	3.55	0.83	9.01	2.50	3.29
Acenaphthene	100	17.7	15.5	2.91	22.6	7.89	9.45	15.8	15.6	10.5	14.3
Fluorene	100	45.6	47.2	15.3	47.6	27.8	31.6	7.66	38.1	19.4	30.4
Phenanthrene	100	83.2	91.8	139	96.9	70.8	58.1	74.6	82.0	59.3	90.7
Anthracene	100	8.45	5.05	12.4	8.69	6.90	6.05	7.89	8.34	5.77	8.31
Fluoranthene	100	9.28	11.0	16.5	11.2	11.6	8.58	9.16	11.3	9.64	8.71
Pyrene	100	8.55	9.36	13.8	9.37	9.83	7.04	8.17	11.9	10.0	7.23
Benz[a]anthracene	100	0.53	1.50	0.48	0.67	0.49	0.45	0.39	1.17	0.59	0.48
Chrysene	100	1.44	1.41	1.60	1.53	1.30	1.11	0.98	2.46	1.56	1.01
Benzo[b]fluoranthene	100	1.72	2.03	1.35	1.91	0.44	0.53	1.00	1.91	0.88	1.99
Benzo[k]fluoranthene	100	1.00	0.97	1.21	0.96	0.69	0.75	0.62	0.26	0.95	0.71
Benzo[a]pyrene	100	0.56	0.87	0.75	1.33	0.71	0.92	0.29	1.09	0.52	0.37
Indeno[1,2,3-cd]pyrene	100	0.04	0.12	0.40	0.10	0.36	0.16	0.16	0.29	0.18	0.15
Dibenz[a,h]anthracene	70.0	ND ^b	0.63	1.75	ND	0.29	0.30	0.51	0.11	0.24	ND
Benzo[ghi]perylene	100	0.12	0.13	0.30	0.11	0.02	0.15	0.16	0.23	0.14	0.17
ΣPAHs	100	194	195	209	208	145	129	128	184	122	168
RL (ng/m ³)		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
TCEP ^c	100	12.3	3.18	21.5	11.2	10.2	10.8	28.1	9.63	9.45	11.6
TCPP ^d	100	4.39	4.57	9.08	5.59	4.46	3.10	5.24	0.72	7.29	4.16
TDCEP ^e	100	26.1	13.9	11.9	8.46	8.78	4.20	8.81	11.7	19.3	4.17
TPHP ^f	100	12.0	8.96	10.8	8.71	13.1	5.00	156	16.4	3.37	3.55
ΣOPEs	100	54.8	30.6	53.3	34.0	36.5	23.1	198	38.5	39.5	23.5
RL (ng/m ³ dw)		0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Galaxolide	100	30.1	46.9	40.9	17.2	26.3	15.0	135	53.2	33.4	66.2
Tonalide	100	1.18	3.13	2.67	2.21	3.28	0.98	2.52	1.65	1.75	0.79
ΣPCMs	100	31.3	50.0	43.6	19.5	29.6	16.0	137	54.8	35.2	67.0

55 ^a RL: Reporting limit ($RL = C_{\text{the lowest standard}} \times V_{\text{extract}} / V_{\text{air sampled}}$).

56 ^b ND: Not detected.

57 ^c Tri(2-chloroethyl)phosphate, ^d Tris(2-chloroisopropyl)phosphate, ^e Tris(2-chloro-1-(chloromethyl)ethyl)

58 phosphate, ^f Triphenyl phosphate.

59 Table S8. Detection frequencies (DF, %), reporting limits (RL), and concentrations (ng/g dw) of individual polycyclic aromatic
60 hydrocarbons (PAHs), organophosphate esters (OPEs), and polycyclic musks (PCMs) in pet hair.

Compound	DF (%)	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14
RL ^a (ng/g dw)		1.81	1.69	1.86	1.90	1.87	1.61	1.93	1.72	1.75	1.82	1.97	1.84	2.72	1.84
Acenaphthylene	100	14.5	15.2	27.0	31.5	29.5	26.8	18.9	14.1	33.7	27.5	33.9	<RL	17.4	15.5
Acenaphthene	100	24.8	34.1	41.0	41.8	40.8	36.0	23.4	11.0	3.26	5.27	19.3	19.4	29.9	23.7
Fluorene	100	42.7	22.5	48.9	42.2	63.2	47.8	48.3	26.2	46.7	54.4	32.5	10.9	44.9	21.8
Phenanthrene	100	134	71.9	92.8	139	118	100	98.5	69.0	113	196	98.7	12.0	95.8	63.7
Anthracene	100	13.5	13.8	12.9	11.2	25.8	3.90	4.27	3.30	3.70	24.5	9.30	12.2	32.2	41.3
Fluoranthene	100	37.7	23.1	25.1	31.2	34.2	26.1	23.1	8.82	27.3	51.0	4.12	3.20	23.1	23.0
Pyrene	100	28.6	21.6	26.9	19.2	25.6	<RL	24.2	19.8	<RL	44.7	33.3	3.06	26.2	14.8
Benz[a]anthracene	100	4.06	2.79	1.93	2.56	<RL	2.09	2.09	<RL	<RL	7.46	8.29	<RL	<RL	2.57
Chrysene	100	13.2	7.55	5.25	11.8	8.14	9.69	5.46	3.43	5.20	12.5	16.5	2.02	5.47	7.44
Benzo[b]fluoranthene	100	10.5	4.27	5.12	7.29	4.81	6.15	5.86	4.36	4.78	5.75	7.61	<RL	3.29	9.39
Benzo[k]fluoranthene	100	3.31	2.15	<RL	3.00	1.94	2.03	<RL	<RL	2.21	2.74	3.15	<RL	<RL	3.53
Benzo[a]pyrene	100	12.0	14.3	3.82	7.06	7.10	15.2	13.5	4.13	15.6	4.84	10.8	<RL	4.87	3.75
Indeno[1,2,3-cd]pyrene	71.4	<RL	<RL	11.9	2.19	6.28	3.73	2.29	4.20	10.0	ND ^b	ND	<RL	ND	ND
Dibenz[a,h]anthracene	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[ghi]perylene	0.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ΣPAHs	100	341	235	305	350	368	282	272	172	269	437	278	73.9	289	231
RL (ng/g dw)		1.81	1.69	1.86	1.90	1.87	1.61	1.93	1.72	1.75	1.82	1.97	1.84	2.72	1.84
TCEP ^d	100	172	13.1	15.4	20.4	59.6	136	183	89.2	230	201	731	849	144	464
TCPP ^e	100	6.35	3.28	3.38	46.0	9.57	2.87	5.69	3.93	6.18	9.27	11.5	8.63	5.81	13.1
TDCP ^f	100	91.3	78.8	240	199	194	66.0	58.5	38.2	63.0	200	138	63.1	31.2	70.7
TPHP ^g	100	88.3	117	72.5	92.9	40.3	60.7	48.2	54.9	162	61.8	226	316	42.1	66.9
ΣOPEs	100	358	212	332	358	304	266	295	186	461	472	1106	1237	224	615
RL (ng/g dw)		1.81	1.69	1.86	1.90	1.87	1.61	1.93	1.72	1.75	1.82	1.97	1.84	2.72	1.84
Galaxolide	100	1521	5662	724	1323	8333	1103	1337	827	384	4158	4163	753	28827	4902
Tonalide	100	163	34.0	20.2	166	73.9	215	112	54.4	349	105	92.2	39.8	416	189
ΣPCMs	100	1684	5696	744	1489	8407	1318	1449	881	733	4262	4255	793	29243 ^c	5091

61 ^a RL: Reporting limit (RL = C_{the lowest standard} * V_{extract} / m_{hair}).

62 ^b ND: Not detected.

63 ^c Tri(2-chloroethyl)phosphate, ^d Tris(2-chloroisopropyl)phosphate, ^e Tris(2-chloro-1-(chloromethyl)ethyl) phosphate, ^f Triphenyl phosphate.

64 Table S9. Detection frequencies (DF, %), reporting limits (RL), and concentrations (ng/g dw) of
 65 individual polycyclic aromatic hydrocarbons (PAHs), organophosphate esters (OPEs), and
 66 polycyclic musks (PCMs) in indoor dust.

Compound	DF (%)	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10
RL ^a (ng/g dw)		0.09	0.55	0.37	0.38	0.57	0.58	0.35	0.37	0.40	0.32
Acenaphthylene	100	8.86	39.3	4.97	50.1	48.5	8.51	30.2	107	53.7	54.8
Acenaphthene	100	3.63	35.9	6.70	11.3	18.4	11.2	29.8	48.2	92.7	45.4
Fluorene	100	0.98	38.6	4.48	0.71	16.8	18.3	30.0	21.3	21.0	4.60
Phenanthrene	100	53.3	108	24.0	19.5	187	200	120	149	148	170
Anthracene	100	14.7	64.9	5.69	16.5	49.9	152	24.0	17.3	37.0	120
Fluoranthene	100	34.9	68.8	10.5	64.6	104	149	98.5	86.8	121	118
Pyrene	100	6.82	16.2	12.0	65.3	100	119	43.1	72.2	131	26.2
Benz[a]anthracene	100	2.67	12.9	2.46	77.4	24.3	50.1	21.1	5.97	38.3	5.20
Chrysene	100	22.0	42.8	6.53	78.0	67.5	143	43.2	13.7	109	63.4
Benzo[b]fluoranthene	100	6.28	48.6	1.27	65.6	22.4	82.7	16.9	2.19	33.9	23.2
Benzo[k]fluoranthene	100	1.49	10.3	4.58	55.9	47.1	18.6	22.1	5.10	32.0	20.4
Benzo[a]pyrene	100	9.72	35.1	5.33	59.2	27.8	45.7	15.9	1.52	44.8	61.2
Indeno[1,2,3-cd]pyrene	100	2.31	27.9	10.6	44.6	16.8	25.8	13.0	10.2	61.1	17.3
Dibenz[a,h]anthracene	100	0.40	2.54	2.53	23.4	7.72	7.53	4.89	8.76	3.42	22.4
Benzo[ghi]perylene	100	5.35	35.3	1.50	43.3	10.4	22.9	9.72	1.23	34.9	10.4
ΣPAHs	100	173	587	103	676	749	1055	522	550	961	762
RL (ng/g dw)		0.09	0.55	0.37	0.38	0.57	0.58	0.35	0.37	0.40	0.32
TCEP ^b	100	79.1	288	92.0	13.1	115	245	215	59.6	720	409
TCPP ^c	100	79.3	13.5	12.5	1.43	5.50	4.85	2.54	6.31	12.8	6.58
TDCP ^d	100	54.2	1726	97.9	2394	144	3889	399	243	513	231
TPHP ^e	100	17.3	964	70.2	50.5	186	440	223	36.5	525	194
ΣOPEs	100	230	2991	273	2459	450	4578	840	346	1770	840
RL (ng/g dw)		0.09	0.55	0.37	0.38	0.57	0.58	0.35	0.37	0.40	0.32
Galaxolide	100	942	2184	253	113	463	2526	1350	442	5292	1483
Tonalide	100	61.1	83.5	7.13	6.66	22.4	140	24.7	20.6	114	57.9
ΣPCMs	100	1003	2268	260	120	486	2666	1375	463	5406	1541

67 ^aRL: Reporting limit (RL = C_{the lowest standard} * V_{extract} / m_{dust})

68 Organophosphate esters included ^bTri(2-chloroethyl)phosphate, ^cTris(2-chloroisopropyl)phosphate,

69 ^dTris(2-chloro-1-(chloromethyl)ethyl)phosphate, ^eTriphenyl phosphate.

70 Table S10. Detection frequencies (DF, %), reporting limits (RL), and concentrations (ng/m³) of
71 individual antibiotics and current-use pesticides (CUPs) in indoor air.

Compound	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	DF (%)
RL ^a (ng/m ³)	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	
Sulfadiazine	0.03	0.07	0.10	0.09	0.32	0.26	0.09	0.22	0.42	0.04	100%
Sulfamethoxazole	0.09	0.19	0.04	0.13	0.03	0.04	0.05	0.43	0.03	0.04	100%
Sulfapyridine	0.12	0.13	0.14	0.34	0.18	0.41	0.41	0.38	0.06	0.07	100%
ΣAntibiotics	0.24	0.39	0.29	0.57	0.53	0.71	0.56	1.02	0.51	0.15	
Acetochlor	0.03	0.02	0.04	0.07	0.04	0.04	0.01	0.03	0.05	0.03	100%
Bensulfuron methyl	0.05	0.12	0.05	0.06	0.05	0.12	0.02	0.13	0.07	0.04	100%
Bispyribac-sodium	0.57	0.42	0.54	0.29	0.37	0.20	0.38	0.52	0.31	0.33	100%
Carbofuran	0.06	0.09	0.08	0.10	0.11	0.08	0.10	0.52	0.09	0.10	100%
Carbofuranphenol	0.63	0.80	0.65	0.44	0.50	0.59	0.78	0.53	0.21	0.81	100%
Metolachlor	0.01	0.02	0.03	0.02	0.04	0.02	0.02	0.03	0.01	0.02	100%
2-Aminobenzimidazole	0.06	0.04	0.05	0.07	0.39	0.85	0.06	0.31	0.08	0.03	100%
Azoxystrobin	0.05	ND ^b	ND	ND	0.05	ND	ND	ND	0.04	ND	30%
Carbendazim	ND	ND	0.002	0.01	0.01	0.01	0.003	0.01	0.01	0.001	80%
Prochloraz	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
Acetamiprid	0.02	ND	ND	0.02	ND	ND	ND	0.03	ND	ND	30%
Clothianidin	ND	0.02	0.03	0.07	0.10	0.05	0.03	0.58	0.06	ND	80%
Dinotefuran	0.80	0.93	0.21	0.28	0.36	0.27	0.55	0.28	0.18	0.17	100%
Thiacloprid	ND	ND	ND	ND	ND	ND	ND	0.05	ND	ND	10%
Thiamethoxam	0.03	0.03	0.05	0.22	0.12	0.04	ND	1.30	0.06	0.02	90%
Diazinon	0.04	0.04	0.03	0.06	0.06	0.04	0.05	0.13	0.05	0.04	100%
Profenofos	1.51	2.55	1.86	1.42	5.40	4.05	2.28	3.37	2.04	0.83	100%
ΣCUPs	3.87	5.08	3.63	3.11	7.61	6.35	4.30	7.82	3.28	3.87	

72 ^a RL: Reporting limit ($RL = C_{\text{the lowest standard}} * V_{\text{extract}} / V_{\text{air}}$).

73 ^b ND: Not detected.

74 Table S11. Detection frequencies (DF, %), reporting limits (RL) and concentrations (ng/g dw) of
75 individual antibiotics and current-use pesticides (CUPs) in pet hair.

Compound	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	DF (%)
RL ^a (ng/g dw)	1.81	1.69	1.86	1.90	1.87	1.61	1.93	1.72	1.75	1.82	1.97	1.84	2.72	1.84	
Sulfadiazine	0.16	0.45	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	100%
Sulfamethoxazole	0.57	0.53	<RL	<RL	<RL	<RL	<RL	<RL	<RL	12.3	<RL	<RL	<RL	<RL	100%
Sulfapyridine	1.32	1.13	<RL	<RL	2.10	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	100%
ΣAntibiotics	2.05	2.10	2.80	2.86	2.10	2.42	2.89	2.58	2.62	12.3	2.96	2.76	4.08	2.76	
Acetochlor	1.39	0.32	<RL	2.87	1.89	1.99	2.06	3.27	2.71	<RL	<RL	2.43	<RL	<RL	100%
Bensulfuron methyl	0.18	ND ^b	<RL	ND	ND	<RL	ND	ND	<RL	<RL	<RL	<RL	ND	ND	30%
Bispyribac-sodium	4.64	2.29	2.36	3.09	2.09	<RL	3.04	1.98	<RL	<RL	2.26	<RL	3.46	5.15	100%
Carbofuran	0.20	0.13	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	100%
Carbofuranphenol	37.9	2.72	40.4	17.7	71.3	21.3	47.1	20.8	14.5	23.1	122	21.0	30.2	47.2	100%
Metolachlor	0.17	0.12	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	100%
2-Aminobenzimidazole	ND	ND	ND	ND	ND	ND	ND	ND	ND	<RL	ND	<RL	ND	ND	20%
Azoxystrobin	1.04	0.22	<RL	ND	ND	<RL	<RL	<RL	ND	ND	ND	<RL	ND	<RL	40.0%
Carbendazim	9.56	ND	3.23	<RL	ND	<RL	<RL	<RL	ND	<RL	<RL	10.5	20.5	21.3	70%
Prochloraz	0.70	2.09	ND	<RL	<RL	<RL	<RL	ND	ND	<RL	<RL	<RL	<RL	8.43	70%
Acetamiprid	2.06	ND	4.26	ND	<RL	<RL	<RL	<RL	ND	<RL	<RL	<RL	ND	<RL	60%
Clothianidin	2.34	0.51	<RL	<RL	3.91	3.00	<RL	<RL	2.04	<RL	<RL	<RL	<RL	<RL	100%
Dinotefuran	2.45	4.48	7.09	13.0	<RL	6.69	15.7	<RL	3.29	6.46	19.4	18.1	13.2	9.44	100%
Thiacloprid	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
Thiamethoxam	1.00	0.729	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	100%
Diazinon	0.56	0.37	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	100%
Profenofos	19.1	19.2	51.5	39.8	89.3	76.1	54.3	22.3	20.0	65.4	82.5	21.7	34.3	31.7	100%
ΣCUPs	85.2	34.8	116	83.2	175	117	131	56.1	47.7	106	236	83.9	111	131	

76 ^aRL: Reporting limit ($RL = (C_{\text{the lowest standard}} * V_{\text{extract}}) / m_{\text{hair}}$).

77 ^bND: Not detected.

78 Table S12. Detection frequencies (DF, %), reporting limits (RL), and concentrations (ng/g dw)
79 of individual antibiotics and current-use pesticides (CUPs) in indoor dust.

Compound	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	DF (%)
RL ^a (ng/g dw)	0.09	0.55	0.37	0.38	0.57	0.58	0.35	0.37	0.40	0.32	
Sulfadiazine	0.18	1.53	<RL	<RL	0.54	<RL	<RL	<RL	<RL	<RL	100%
Sulfamethoxazole	0.18	2.91	<RL	<RL	6.48	<RL	2.77	12.9	4.35	0.77	100%
Sulfapyridine	0.13	0.91	<RL	<RL	<RL	<RL	1.16	0.43	<RL	0.36	100%
ΣAntibiotics	0.49	5.35	0.55	0.57	7.31	0.88	4.11	13.5	4.75	1.28	
Acetochlor	0.24	4.22	0.39	6.53	4.29	4.58	0.63	0.48	<RL	2.47	100%
Bensulfuron methyl	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	30%
Bispyribac-sodium	0.19	<RL	<RL	<RL	0.69	0.85	0.81	<RL	0.92	0.43	100%
Carbofuran	<RL	<RL	<RL	<RL	<RL	0.83	<RL	<RL	<RL	0.33	100%
Carbofuranphenol	0.90	3.14	1.34	0.61	2.54	4.29	3.15	0.89	2.63	1.91	100%
Metolachlor	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	100%
2-Aminobenzimidazole	0.11	<RL	<RL	<RL	<RL	<RL	<RL	<RL	4.70	2.62	20%
Azoxystrobin	<RL	<RL	0.14	<RL	<RL	<RL	1.19	<RL	1.60	0.74	40%
Carbendazim	1.03	8.84	4.31	3.99	34.7	20.1	3.53	<RL	7.47	10.43	70%
Prochloraz	<RL	1.08	2.32	<RL	<RL	0.66	0.86	<RL	0.73	1.48	70%
Acetamiprid	1.61	1.27	0.62	0.78	0.71	1.01	<RL	<RL	0.65	0.44	60%
Clothianidin	0.27	3.95	4.88	0.76	<RL	1.18	0.87	0.83	<RL	<RL	100%
Dinotefuran	0.13	3.87	1.57	2.69	1.89	8.46	5.14	9.96	5.36	1.51	100%
Thiacloprid	ND ^b	ND	<RL	ND	<RL	ND	<RL	<RL	<RL	<RL	0
Thiamethoxam	0.37	2.06	1.10	1.15	3.68	0.80	0.36	<RL	0.67	0.88	100%
Diazinon	0.11	0.68	<RL	<RL	0.67	<RL	<RL	0.44	<RL	<RL	100%
Profenofos	7.42	44.5	7.43	10.9	129	124	14.9	30.5	32.8	6.94	100%
ΣCUPs	12.6	75.3	25.4	28.9	181	168	32.7	45.2	58.9	31.0	

80 ^aRL: Reporting limit ($RL = (C_{\text{the lowest standard}} * V_{\text{extract}}) / m_{\text{dust}}$).

81 ^bND: Not detected.

Table S13. Measured (mean $\pm$ standard deviation) and estimated dust-air and hair-air partition coefficients ($\log K_d$ and $\log K_h$, respectively) of polycyclic aromatic hydrocarbons (PAHs), organophosphate esters (OPEs), polycyclic musks (PCMs), antibiotics, and current use pesticides (CUPs). The estimated values include that from the octanol-air partition coefficient (K_{oa}) one-parameter absorption and poly-parameter linear free energy relationship (pp-LFER) models.

Compound	$\log K_d$	$\log K_h$	$\log K_{d_koa}$	$\log K_{h_koa}$	$\log K_{d_pp}$	$\log K_{h_pp}$
Acenaphthylene	1.07 $\pm$ 1.04	0.94 $\pm$ 1.03	-6.48	-5.68	0.85	0.83
Acenaphthene	0.41 $\pm$ 0.38	0.55 $\pm$ 0.67	-6.66	-5.86	0.75	0.76
Fluorene	-0.09 $\pm$ 0.06	0.23 $\pm$ 0.17	-6.10	-5.30	0.95	0.88
Phenanthrene	0.21 $\pm$ 0.03	0.08 $\pm$ -0.27	-5.29	-4.49	0.99	0.78
Anthracene	0.88 $\pm$ 0.89	0.28 $\pm$ 0.15	-5.32	-4.52	1.02	0.81
Fluoranthene	0.94 $\pm$ 0.70	0.36 $\pm$ 0.09	-4.24	-3.44	1.15	0.74
Pyrene	0.82 $\pm$ 0.73	0.41 $\pm$ 0.00	-4.19	-3.39	1.09	0.66
Benz[a]anthracene	1.63 $\pm$ 1.64	0.71 $\pm$ 0.25	-2.72	-1.92	1.37	0.83
Chrysene	1.67 $\pm$ 1.57	0.74 $\pm$ 0.31	-1.66	-0.86	1.52	0.88
Benzo[b]fluoranthene	1.53 $\pm$ 1.66	0.74 $\pm$ 0.56	-2.70	-1.90	1.37	0.81
Benzo[k]fluoranthene	1.45 $\pm$ 1.34	0.69 $\pm$ 0.58	-1.63	-0.83	1.53	0.80
Benzo[a]pyrene	1.70 $\pm$ 1.68	1.16 $\pm$ 1.12	-1.44	-0.64	1.47	0.80
Indeno[1,2,3-cd]pyrene	2.19 $\pm$ 2.16	1.48 $\pm$ 1.38	-0.41	0.39	1.74	0.90
Dibenz[a,h]anthracene	1.36 $\pm$ 1.43	/ ^a	-0.45	0.35	1.71	0.97
Benzo[ghi]perylene	2.25 $\pm$ 2.25	/ ^a	-0.57	0.23	1.67	0.92
TCEP ^b	1.42 $\pm$ 1.50	1.35 $\pm$ 1.44	-5.02	-4.22	0.72	0.65
TCP ^b	0.58 $\pm$ 0.75	0.54 $\pm$ 0.68	-3.32	-2.52	1.25	1.56
TDCP ^b	2.18 $\pm$ 2.46	1.07 $\pm$ 0.80	-2.40	-1.60	1.60	1.05
TPHP ^b	1.64 $\pm$ 1.74	1.17 $\pm$ 1.37	-2.10	-1.30	1.55	1.32
Galaxolide	1.68 $\pm$ 1.80	2.05 $\pm$ 2.18	-5.22	-4.42	1.66	1.41

Tonalide	1.60±1.65	2.04±2.13	-6.87	-6.07	1.67	1.36
Sulfadiazine	0.99±1.03	0.77±0.11	-4.90	-4.10	1.83	1.30
Sulfamethoxazole	1.84±1.91	1.10±1.15	-1.30	-0.49	1.77	1.47
Sulfapyridine	0.54±0.41	0.94±0.38	-1.70	-0.90	1.76	1.36
Acetochlor	1.89±1.81	1.87±1.88	1.05	1.85	1.63	1.83
Bensulfuron methyl	/ ^a	0.56	-1.32	-0.52	1.08	1.48
Bispyribac-sodium	0.33±0.13	0.94±0.62	0.35	1.15	0.61	1.32
Carbofuran	0.83±0.70	0.38±0.13	/ ^a	/ ^a	-0.28	0.69
Carbofuranphenol	0.62±0.54	1.84±1.78	-2.67	-1.87	0.70	0.86
Metolachlor	/ ^a	1.06±0.89	1.40	2.20	2.41	1.44
2-Aminobenzimidazole	1.69±1.64	/ ^a	-3.82	-3.02	1.70	1.45
Azoxystrobin	1.60	1.35	-4.90	-4.10	0.76	1.05
Carbendazim	3.46±3.54	4.05±4.05	-2.40	-1.60	1.44	1.41
Prochloraz	/ ^a	/ ^a	2.26	3.06	2.29	1.92
Acetamiprid	1.78±1.47	2.01	-3.78	-2.98	1.26	1.50
Clothianidin	1.85±1.93	1.65±1.31	-4.99	-4.19	1.48	1.39
Dinotefuran	1.15±1.11	1.63±1.51	-3.93	-3.13	1.21	1.43
Thiacloprid	/ ^a	/ ^a	-3.67	-2.87	1.29	1.32
Thiamethoxam	1.43±1.32	1.46±0.81	-3.86	-3.06	1.55	1.76
Diazinon	0.93±0.83	1.07±0.53	-2.73	-1.93	1.46	1.39
Profenofos	1.11±0.95	1.34±1.21	-2.28	-1.48	1.52	1.40

^a Not available.

^b Abbreviations of OPEs are as follows: tris(2-chloroethyl) phosphate (TCEP), tris(2-chloroisopropyl) phosphate (TCPP), tris(2,3-dichloropropyl) phosphate (TDCP) and triphenyl phosphate (TPHP).

Table S14. Multiple regression coefficients of the five Abraham's solute descriptors for K_{d_pp} and K_{h_pp} .

□	K_{d_pp}			K_{h_pp}		
	Coefficients	Std.	<i>p</i> -value	Coefficients	Std.	<i>p</i> -value
For all compounds						
Intercept	-0.28	0.64	0.67	0.69	0.70	0.34
Abraham's S	-0.28	0.40	0.48	-0.62	0.46	0.19
Abraham's A	1.90	0.69	0.01*	1.07	0.70	0.14
Abraham's B	-0.46	0.30	0.13	0.32	0.31	0.32
Abraham's V	0.80	0.55	0.16	0.32	0.62	0.61
Abraham's L	0.08	0.11	0.46	0.05	0.13	0.71
Regression <i>p</i> -value	0.078			0.208		
R ²	0.271	□	□	0.210	□	□
Hydrophobic compounds						
Intercept	-2.01	0.46	<0.001*	-0.99	0.44	0.04*
Abraham's S	0.38	0.45	0.41	-1.29	0.45	0.01*
Abraham's A	23.0	21.1	0.29	77.9	20.7	<0.01*
Abraham's B	-1.16	0.50	0.03*	-1.43	0.47	0.01*
Abraham's V	1.79	0.50	<0.01*	1.95	0.48	<0.01*
Abraham's L	-0.01	0.09	0.92	0.09	0.10	0.38
Regression <i>p</i> -value	0.0001*			0.0010*		
R ²	0.784	□	□	0.762	□	□
Hydrophilic compounds						
Intercept	2.79	1.30	0.06*	5.10	1.22	0.00*
Abraham's S	-1.88	0.78	0.04*	-2.26	0.75	0.01*
Abraham's A	0.38	1.38	0.79	-1.79	1.09	0.13
Abraham's B	-0.54	1.00	0.60	-0.98	0.66	0.17
Abraham's V	-2.22	1.48	0.17	-4.36	1.31	0.01*
Abraham's L	0.70	0.40	0.11	1.09	0.32	0.01*
Regression <i>p</i> -value	0.270			0.076		
R ²	0.461	□	□	0.585	□	□

* Significant at 0.05 level.

82 Table S15. Average daily dose (ADD, air: ng/m³/d and pet hair and dust: ng/kg/d) of individual polycyclic aromatic hydrocarbons
83 (PAHs), organophosphate esters (OPEs) and polycyclic musks (PCMs) assessed by indoor air inhalation (ADD_{inhal}) and ingestion
84 (ADD_{ingest}) and dermal (ADD_{dermal}) exposure of dust and pet hair-bound contaminants.

Compound	air: ADD _{inhal}		dust: ADD _{ingest}		hair: ADD _{ingest}		dust: ADD _{dermal}		hair: ADD _{dermal}	
	Child	Aldult	Child	Aldult	Child	Aldult	Child	Aldult	Child	Aldult
Acenaphthylene	2.68×10 ⁻⁰⁹	1.31×10 ⁻⁰⁹	1.22×10 ⁻⁰¹	2.96×10 ⁻⁰⁴	7.05×10 ⁻⁰²	1.71×10 ⁻⁰⁴	1.37×10 ⁻⁰¹	3.49×10 ⁻⁰²	7.90×10 ⁻⁰²	2.02×10 ⁻⁰²
Acenaphthene	6.48×10 ⁻⁰⁹	3.16×10 ⁻⁰⁹	9.10×10 ⁻⁰²	2.21×10 ⁻⁰⁴	7.58×10 ⁻⁰²	1.84×10 ⁻⁰⁴	1.02×10 ⁻⁰¹	2.60×10 ⁻⁰²	8.49×10 ⁻⁰²	2.17×10 ⁻⁰²
Fluorene	1.52×10 ⁻⁰⁸	7.43×10 ⁻⁰⁹	4.70×10 ⁻⁰²	1.14×10 ⁻⁰⁴	1.19×10 ⁻⁰¹	2.88×10 ⁻⁰⁴	5.27×10 ⁻⁰²	1.35×10 ⁻⁰²	1.33×10 ⁻⁰¹	3.39×10 ⁻⁰²
Phenanthrene	4.15×10 ⁻⁰⁸	2.02×10 ⁻⁰⁸	3.53×10 ⁻⁰¹	8.58×10 ⁻⁰⁴	3.00×10 ⁻⁰¹	7.30×10 ⁻⁰⁴	3.96×10 ⁻⁰¹	1.01×10 ⁻⁰¹	3.37×10 ⁻⁰¹	8.60×10 ⁻⁰²
Anthracene	3.82×10 ⁻⁰⁹	1.86×10 ⁻⁰⁹	1.50×10 ⁻⁰¹	3.65×10 ⁻⁰⁴	4.54×10 ⁻⁰²	1.10×10 ⁻⁰⁴	1.68×10 ⁻⁰¹	4.30×10 ⁻⁰²	5.09×10 ⁻⁰²	1.30×10 ⁻⁰²
Fluoranthene	5.25×10 ⁻⁰⁹	2.56×10 ⁻⁰⁹	2.57×10 ⁻⁰¹	6.24×10 ⁻⁰⁴	7.31×10 ⁻⁰²	1.78×10 ⁻⁰⁴	2.88×10 ⁻⁰¹	7.36×10 ⁻⁰²	8.19×10 ⁻⁰²	2.09×10 ⁻⁰²
Pyrene	4.67×10 ⁻⁰⁹	2.28×10 ⁻⁰⁹	1.78×10 ⁻⁰¹	4.32×10 ⁻⁰⁴	7.20×10 ⁻⁰²	1.75×10 ⁻⁰⁴	1.99×10 ⁻⁰¹	5.09×10 ⁻⁰²	8.06×10 ⁻⁰²	2.06×10 ⁻⁰²
Benzo[a]anthracene	3.30×10 ⁻¹⁰	1.61×10 ⁻¹⁰	7.21×10 ⁻⁰²	1.75×10 ⁻⁰⁴	1.13×10 ⁻⁰²	2.74×10 ⁻⁰⁵	8.08×10 ⁻⁰²	2.06×10 ⁻⁰²	1.26×10 ⁻⁰²	3.23×10 ⁻⁰³
Chrysene	7.05×10 ⁻¹⁰	3.44×10 ⁻¹⁰	1.77×10 ⁻⁰¹	4.29×10 ⁻⁰⁴	2.43×10 ⁻⁰²	5.91×10 ⁻⁰⁵	1.98×10 ⁻⁰¹	5.05×10 ⁻⁰²	2.73×10 ⁻⁰²	6.97×10 ⁻⁰³
Benzo[b]fluoranthene	6.74×10 ⁻¹⁰	3.29×10 ⁻¹⁰	9.09×10 ⁻⁰²	2.21×10 ⁻⁰⁴	1.83×10 ⁻⁰²	4.44×10 ⁻⁰⁵	1.02×10 ⁻⁰¹	2.60×10 ⁻⁰²	2.05×10 ⁻⁰²	5.23×10 ⁻⁰³
Benzo[k]fluoranthene	3.98×10 ⁻¹⁰	1.94×10 ⁻¹⁰	6.53×10 ⁻⁰²	1.59×10 ⁻⁰⁴	8.02×10 ⁻⁰³	1.95×10 ⁻⁰⁵	7.31×10 ⁻⁰²	1.87×10 ⁻⁰²	8.98×10 ⁻⁰³	2.29×10 ⁻⁰³
Benzo[a]pyrene	3.63×10 ⁻¹⁰	1.77×10 ⁻¹⁰	9.18×10 ⁻⁰²	2.23×10 ⁻⁰⁴	2.70×10 ⁻⁰²	6.56×10 ⁻⁰⁵	1.03×10 ⁻⁰¹	2.63×10 ⁻⁰²	3.02×10 ⁻⁰²	7.73×10 ⁻⁰³
Indeno[1,2,3-cd]pyrene	9.58×10 ⁻¹¹	4.67×10 ⁻¹¹	6.89×10 ⁻⁰²	1.67×10 ⁻⁰⁴	1.74×10 ⁻⁰²	4.22×10 ⁻⁰⁵	7.71×10 ⁻⁰²	1.97×10 ⁻⁰²	1.95×10 ⁻⁰²	4.98×10 ⁻⁰³
Dibenz[a,h]anthracene	2.68×10 ⁻¹⁰	1.31×10 ⁻¹⁰	2.51×10 ⁻⁰²	6.09×10 ⁻⁰⁵	ND ^e	ND	2.81×10 ⁻⁰²	7.17×10 ⁻⁰³	ND	ND
Benzo[ghi]perylene	7.53×10 ⁻¹¹	3.67×10 ⁻¹¹	5.25×10 ⁻⁰²	1.27×10 ⁻⁰⁴	ND	ND	5.88×10 ⁻⁰²	1.50×10 ⁻⁰²	ND	ND
TCEP ^a	6.28×10 ⁻⁰⁹	3.06×10 ⁻⁰⁹	6.71×10 ⁻⁰¹	1.63×10 ⁻⁰³	7.09×10 ⁻⁰¹	1.72×10 ⁻⁰³	7.51×10 ⁻⁰¹	1.92×10 ⁻⁰¹	7.94×10 ⁻⁰¹	2.03×10 ⁻⁰¹
TCP ^b	2.38×10 ⁻⁰⁹	1.16×10 ⁻⁰⁹	4.36×10 ⁻⁰²	1.06×10 ⁻⁰⁴	2.91×10 ⁻⁰²	7.06×10 ⁻⁰⁵	4.88×10 ⁻⁰²	1.25×10 ⁻⁰²	3.25×10 ⁻⁰²	8.31×10 ⁻⁰³
TD ^c	5.75×10 ⁻⁰⁹	2.80×10 ⁻⁰⁹	2.91×10 ⁺⁰⁰	7.06×10 ⁻⁰³	3.28×10 ⁻⁰¹	7.97×10 ⁻⁰⁴	3.26×10 ⁺⁰⁰	8.32×10 ⁻⁰¹	3.68×10 ⁻⁰¹	9.40×10 ⁻⁰²
TPHP ^d	1.17×10 ⁻⁰⁸	5.69×10 ⁻⁰⁹	8.11×10 ⁻⁰¹	1.97×10 ⁻⁰³	3.11×10 ⁻⁰¹	7.54×10 ⁻⁰⁴	9.09×10 ⁻⁰¹	2.32×10 ⁻⁰¹	3.48×10 ⁻⁰¹	8.89×10 ⁻⁰²
Galaxolide	2.27×10 ⁻⁰⁸	1.11×10 ⁻⁰⁸	4.51×10 ⁺⁰⁰	1.10×10 ⁻⁰²	8.49×10 ⁺⁰⁰	2.06×10 ⁻⁰²	5.06×10 ⁺⁰⁰	1.29×10 ⁺⁰⁰	9.51×10 ⁺⁰⁰	2.43×10 ⁺⁰⁰
Tonalide	9.88×10 ⁻¹⁰	4.82×10 ⁻¹⁰	1.61×10 ⁻⁰¹	3.92×10 ⁻⁰⁴	3.72×10 ⁻⁰¹	9.04×10 ⁻⁰⁴	1.81×10 ⁻⁰¹	4.62×10 ⁻⁰²	4.17×10 ⁻⁰¹	1.07×10 ⁻⁰¹

85 Organophosphate esters include ^aTri(2-chloroethyl)phosphate, ^bTris(2-chloroisopropyl)phosphate, ^cTris(2-chloro-1-(chloromethyl)ethyl)
86 phosphate, ^dTriphenyl phosphate.
87 ^eND: Not detected.

88 Table S16. Average daily dose (ADD, air: ng/m³/d and hair and dust: ng/kg/d) of individual antibiotics and current-use pesticides
89 (CUPs) assessed by indoor air inhalation (ADD_{inhal}) and ingestion (ADD_{ingest}) and dermal (ADD_{dermal}) exposure of dust and pet hair-
90 bound contaminants.

Compound	air: ADD _{inhal}		dust: ADD _{ingest}		hair: ADD _{ingest}		dust: ADD _{dermal}		hair: ADD _{dermal}	
	Child	Aldult	Child	Aldult	Child	Aldult	Child	Aldult	Child	Aldult
Sulfadiazine	8.06×10 ⁻¹¹	3.93×10 ⁻¹¹	1.09×10 ⁻⁰³	2.65×10 ⁻⁰⁶	2.58×10 ⁻⁰³	6.26×10 ⁻⁰⁶	1.22×10 ⁻⁰³	3.12×10 ⁻⁰⁴	2.89×10 ⁻⁰³	7.37×10 ⁻⁰⁴
Sulfamethoxazole	5.30×10 ⁻¹¹	2.58×10 ⁻¹¹	9.31×10 ⁻⁰³	2.26×10 ⁻⁰⁵	5.13×10 ⁻⁰³	1.24×10 ⁻⁰⁵	1.04×10 ⁻⁰²	2.66×10 ⁻⁰³	5.74×10 ⁻⁰³	1.47×10 ⁻⁰³
Sulfapyridine	1.10×10 ⁻¹⁰	5.36×10 ⁻¹¹	1.24×10 ⁻⁰³	3.01×10 ⁻⁰⁶	3.22×10 ⁻⁰³	7.82×10 ⁻⁰⁶	1.39×10 ⁻⁰³	3.55×10 ⁻⁰⁴	3.61×10 ⁻⁰³	9.22×10 ⁻⁰⁴
ΣAntibiotics	2.43×10 ⁻¹⁰	1.19×10 ⁻¹⁰	1.16×10 ⁻⁰²	2.83×10 ⁻⁰⁵	1.09×10 ⁻⁰²	2.65×10 ⁻⁰⁵	1.30×10 ⁻⁰²	3.33×10 ⁻⁰³	1.22×10 ⁻⁰²	3.13×10 ⁻⁰³
Acetochlor	1.72×10 ⁻¹¹	8.39×10 ⁻¹²	7.21×10 ⁻⁰³	1.75×10 ⁻⁰⁵	5.15×10 ⁻⁰³	1.25×10 ⁻⁰⁵	8.07×10 ⁻⁰³	2.06×10 ⁻⁰³	5.77×10 ⁻⁰³	1.47×10 ⁻⁰³
Bensulfuron methyl	3.55×10 ⁻¹¹	1.73×10 ⁻¹¹	5.98×10 ⁻⁰⁴	1.45×10 ⁻⁰⁶	1.20×10 ⁻⁰³	2.92×10 ⁻⁰⁶	6.70×10 ⁻⁰⁴	1.71×10 ⁻⁰⁴	1.35×10 ⁻⁰³	3.44×10 ⁻⁰⁴
Bispyribac-sodium	1.93×10 ⁻¹⁰	9.40×10 ⁻¹¹	1.42×10 ⁻⁰³	3.45×10 ⁻⁰⁶	7.26×10 ⁻⁰³	1.76×10 ⁻⁰⁵	1.59×10 ⁻⁰³	4.07×10 ⁻⁰⁴	8.13×10 ⁻⁰³	2.08×10 ⁻⁰³
Carbofuran	6.53×10 ⁻¹¹	3.18×10 ⁻¹¹	8.11×10 ⁻⁰⁴	1.97×10 ⁻⁰⁶	2.52×10 ⁻⁰³	6.11×10 ⁻⁰⁶	9.08×10 ⁻⁰⁴	2.32×10 ⁻⁰⁴	2.82×10 ⁻⁰³	7.20×10 ⁻⁰⁴
Carbofuranphenol	2.91×10 ⁻¹⁰	1.42×10 ⁻¹⁰	6.42×10 ⁻⁰³	1.56×10 ⁻⁰⁵	1.11×10 ⁻⁰¹	2.69×10 ⁻⁰⁴	7.19×10 ⁻⁰³	1.84×10 ⁻⁰³	1.24×10 ⁻⁰¹	3.17×10 ⁻⁰²
Metolachlor	1.08×10 ⁻¹¹	5.28×10 ⁻¹²	5.98×10 ⁻⁰⁴	1.45×10 ⁻⁰⁶	2.51×10 ⁻⁰³	6.09×10 ⁻⁰⁶	6.70×10 ⁻⁰⁴	1.71×10 ⁻⁰⁴	2.81×10 ⁻⁰³	7.18×10 ⁻⁰⁴
2- Aminobenzimidazole	9.58×10 ⁻¹¹	4.67×10 ⁻¹¹	2.70×10 ⁻⁰³	6.57×10 ⁻⁰⁶	ND	ND	3.03×10 ⁻⁰³	7.74×10 ⁻⁰⁴	ND	ND
Azoxystrobin	ND ^a	ND	1.48×10 ⁻⁰³	3.60×10 ⁻⁰⁶	1.43×10 ⁻⁰³	3.46×10 ⁻⁰⁶	1.66×10 ⁻⁰³	4.24×10 ⁻⁰⁴	1.60×10 ⁻⁰³	4.08×10 ⁻⁰⁴
Carbendazim	2.75×10 ⁻¹²	1.34×10 ⁻¹²	2.84×10 ⁻⁰²	6.89×10 ⁻⁰⁵	1.63×10 ⁻⁰²	3.95×10 ⁻⁰⁵	3.18×10 ⁻⁰²	8.12×10 ⁻⁰³	1.82×10 ⁻⁰²	4.66×10 ⁻⁰³
Prochloraz	ND	ND	2.35×10 ⁻⁰³	5.70×10 ⁻⁰⁶	4.08×10 ⁻⁰³	9.91×10 ⁻⁰⁶	2.63×10 ⁻⁰³	6.72×10 ⁻⁰⁴	4.57×10 ⁻⁰³	1.17×10 ⁻⁰³
Acetamiprid	ND	ND	2.24×10 ⁻⁰³	5.44×10 ⁻⁰⁶	2.92×10 ⁻⁰³	7.08×10 ⁻⁰⁶	2.51×10 ⁻⁰³	6.41×10 ⁻⁰⁴	3.27×10 ⁻⁰³	8.35×10 ⁻⁰⁴
Clothianidin	5.83×10 ⁻¹¹	2.85×10 ⁻¹¹	4.01×10 ⁻⁰³	9.75×10 ⁻⁰⁶	4.41×10 ⁻⁰³	1.07×10 ⁻⁰⁵	4.50×10 ⁻⁰³	1.15×10 ⁻⁰³	4.94×10 ⁻⁰³	1.26×10 ⁻⁰³
Dinotefuran	1.97×10 ⁻¹⁰	9.63×10 ⁻¹¹	1.22×10 ⁻⁰²	2.96×10 ⁻⁰⁵	2.60×10 ⁻⁰²	6.31×10 ⁻⁰⁵	1.36×10 ⁻⁰²	3.48×10 ⁻⁰³	2.91×10 ⁻⁰²	7.44×10 ⁻⁰³
Thiacloprid	ND	ND	3.58×10 ⁻⁰⁴	8.69×10 ⁻⁰⁷	ND	ND	4.01×10 ⁻⁰⁴	1.02×10 ⁻⁰⁴	ND	ND
Thiamethoxam	1.02×10 ⁻¹⁰	4.97×10 ⁻¹¹	3.37×10 ⁻⁰³	8.19×10 ⁻⁰⁶	2.82×10 ⁻⁰³	6.84×10 ⁻⁰⁶	3.78×10 ⁻⁰³	9.65×10 ⁻⁰⁴	3.15×10 ⁻⁰³	8.06×10 ⁻⁰⁴
Diazinon	2.61×10 ⁻¹¹	1.27×10 ⁻¹¹	9.32×10 ⁻⁰⁴	2.26×10 ⁻⁰⁶	2.65×10 ⁻⁰³	6.42×10 ⁻⁰⁶	1.04×10 ⁻⁰³	2.67×10 ⁻⁰⁴	2.96×10 ⁻⁰³	7.57×10 ⁻⁰⁴
Profenofos	1.24×10 ⁻⁰⁹	6.05×10 ⁻¹⁰	1.23×10 ⁻⁰¹	2.98×10 ⁻⁰⁴	1.34×10 ⁻⁰¹	3.26×10 ⁻⁰⁴	1.37×10 ⁻⁰¹	3.51×10 ⁻⁰²	1.51×10 ⁻⁰¹	3.85×10 ⁻⁰²
ΣCUPs	2.33×10 ⁻⁰⁹	1.14×10 ⁻⁰⁹	1.98×10 ⁻⁰¹	4.80×10 ⁻⁰⁴	3.24×10 ⁻⁰¹	7.87×10 ⁻⁰⁴	2.21×10 ⁻⁰¹	5.66×10 ⁻⁰²	3.64×10 ⁻⁰¹	9.29×10 ⁻⁰²

91 ^aND: Not detected.

92 Table S17. Hazard quotients (HQ) of individual polycyclic aromatic hydrocarbons (PAHs), organophosphate esters (OPEs) and
 93 polycyclic musks (PCMs) assessed by indoor air inhalation and ingestion and dermal exposure of dust and pet hair-bound
 94 contaminants.

Compound	air: inhale		dust: ingest		hair: ingest		dust: dermal		hair: dermal	
	Child	Aldult	Child	Aldult	Child	Aldult	Child	Aldult	Child	Aldult
Acenaphthylene	1.82×10 ⁻¹⁰	8.86×10 ⁻¹¹	1.70×10 ⁻⁰⁶	1.66×10 ⁻⁰⁷	2.25×10 ⁻⁰⁷	2.20×10 ⁻⁰⁸	1.91×10 ⁻⁰⁹	5.49×10 ⁻¹⁰	2.52×10 ⁻¹⁰	7.25×10 ⁻¹¹
Acenaphthene	3.83×10 ⁻¹⁰	1.87×10 ⁻¹⁰	5.65×10 ⁻⁰⁷	5.51×10 ⁻⁰⁸	1.34×10 ⁻⁰⁷	1.30×10 ⁻⁰⁸	6.33×10 ⁻¹⁰	1.82×10 ⁻¹⁰	1.50×10 ⁻¹⁰	4.30×10 ⁻¹¹
Fluorene	2.72×10 ⁻¹⁰	1.33×10 ⁻¹⁰	1.22×10 ⁻⁰⁷	1.19×10 ⁻⁰⁸	9.16×10 ⁻⁰⁸	8.93×10 ⁻⁰⁹	1.36×10 ⁻¹⁰	3.91×10 ⁻¹¹	1.03×10 ⁻¹⁰	2.95×10 ⁻¹¹
Phenanthrene	5.17×10 ⁻⁰⁹	2.52×10 ⁻⁰⁹	1.03×10 ⁻⁰⁵	1.01×10 ⁻⁰⁶	1.53×10 ⁻⁰⁶	1.49×10 ⁻⁰⁷	1.16×10 ⁻⁰⁸	3.32×10 ⁻⁰⁹	1.71×10 ⁻⁰⁹	4.92×10 ⁻¹⁰
Anthracene	1.93×10 ⁻¹⁰	9.39×10 ⁻¹¹	1.05×10 ⁻⁰⁶	1.02×10 ⁻⁰⁷	7.90×10 ⁻⁰⁸	7.71×10 ⁻⁰⁹	1.17×10 ⁻⁰⁹	3.38×10 ⁻¹⁰	8.85×10 ⁻¹¹	2.54×10 ⁻¹¹
Fluoranthene	6.12×10 ⁻¹¹	2.98×10 ⁻¹¹	7.82×10 ⁻⁰⁷	7.63×10 ⁻⁰⁸	4.35×10 ⁻⁰⁸	4.24×10 ⁻⁰⁹	8.76×10 ⁻¹⁰	2.52×10 ⁻¹⁰	4.87×10 ⁻¹¹	1.40×10 ⁻¹¹
Pyrene	1.12×10 ⁻¹⁰	5.46×10 ⁻¹¹	9.58×10 ⁻⁰⁷	9.35×10 ⁻⁰⁸	7.84×10 ⁻⁰⁸	7.65×10 ⁻⁰⁹	1.07×10 ⁻⁰⁹	3.08×10 ⁻¹⁰	8.78×10 ⁻¹¹	2.53×10 ⁻¹¹
Benz[a]anthracene	5.46×10 ⁻¹²	2.67×10 ⁻¹²	2.25×10 ⁻⁰⁷	2.19×10 ⁻⁰⁸	7.43×10 ⁻⁰⁹	7.25×10 ⁻¹⁰	2.52×10 ⁻¹⁰	7.23×10 ⁻¹¹	8.32×10 ⁻¹²	2.39×10 ⁻¹²
Chrysene	3.59×10 ⁻¹¹	1.75×10 ⁻¹¹	2.33×10 ⁻⁰⁶	2.28×10 ⁻⁰⁷	6.12×10 ⁻⁰⁸	5.97×10 ⁻⁰⁹	2.62×10 ⁻⁰⁹	7.52×10 ⁻¹⁰	6.85×10 ⁻¹¹	1.97×10 ⁻¹¹
Benzo[b]fluoranthene	1.87×10 ⁻¹¹	9.10×10 ⁻¹²	5.25×10 ⁻⁰⁷	5.12×10 ⁻⁰⁸	2.14×10 ⁻⁰⁸	2.09×10 ⁻⁰⁹	5.88×10 ⁻¹⁰	1.69×10 ⁻¹⁰	2.40×10 ⁻¹¹	6.89×10 ⁻¹²
Benzo[k]fluoranthene	2.39×10 ⁻¹¹	1.16×10 ⁻¹¹	8.04×10 ⁻⁰⁷	7.84×10 ⁻⁰⁸	2.15×10 ⁻⁰⁸	2.09×10 ⁻⁰⁹	9.01×10 ⁻¹⁰	2.59×10 ⁻¹⁰	2.40×10 ⁻¹¹	6.91×10 ⁻¹²
Benzo[a]pyrene	8.10×10 ⁻¹²	3.95×10 ⁻¹²	4.96×10 ⁻⁰⁷	4.84×10 ⁻⁰⁸	2.61×10 ⁻⁰⁸	2.55×10 ⁻⁰⁹	5.55×10 ⁻¹⁰	1.60×10 ⁻¹⁰	2.93×10 ⁻¹¹	8.41×10 ⁻¹²
Indeno[1,2,3-cd]pyrene	6.72×10 ⁻¹¹	3.28×10 ⁻¹¹	1.14×10 ⁻⁰⁵	1.11×10 ⁻⁰⁶	3.02×10 ⁻⁰⁷	2.94×10 ⁻⁰⁸	1.28×10 ⁻⁰⁸	3.67×10 ⁻⁰⁹	3.38×10 ⁻¹⁰	9.71×10 ⁻¹¹
Dibenz[a,h]anthracene	8.22×10 ⁻¹¹	4.01×10 ⁻¹¹	2.87×10 ⁻⁰⁶	2.80×10 ⁻⁰⁷	ND ^e	ND	3.22×10 ⁻⁰⁹	9.25×10 ⁻¹⁰	ND	ND
Benzo[ghi]perylene	4.32×10 ⁻¹²	2.11×10 ⁻¹²	6.35×10 ⁻⁰⁷	6.19×10 ⁻⁰⁸	ND	ND	7.11×10 ⁻¹⁰	2.04×10 ⁻¹⁰	ND	ND
TCEP ^a	2.26×10 ⁻¹²	1.10×10 ⁻¹²	5.38×10 ⁻⁰⁸	5.25×10 ⁻⁰⁹	1.02×10 ⁻⁰⁸	9.93×10 ⁻¹⁰	6.03×10 ⁻¹¹	1.73×10 ⁻¹¹	1.14×10 ⁻¹¹	3.28×10 ⁻¹²
TCPP ^b	5.63×10 ⁻¹²	2.75×10 ⁻¹²	1.42×10 ⁻⁰⁸	1.39×10 ⁻⁰⁹	2.67×10 ⁻⁰⁹	2.61×10 ⁻¹⁰	1.60×10 ⁻¹¹	4.59×10 ⁻¹²	3.00×10 ⁻¹²	8.61×10 ⁻¹³
TDCP ^c	2.21×10 ⁻¹²	1.08×10 ⁻¹²	1.76×10 ⁻⁰⁷	1.72×10 ⁻⁰⁸	8.31×10 ⁻⁰⁹	8.11×10 ⁻¹⁰	1.98×10 ⁻¹⁰	5.68×10 ⁻¹¹	9.31×10 ⁻¹²	2.68×10 ⁻¹²
TPHP ^d	3.41×10 ⁻¹²	1.66×10 ⁻¹²	1.74×10 ⁻⁰⁷	1.70×10 ⁻⁰⁸	1.43×10 ⁻⁰⁸	1.40×10 ⁻⁰⁹	1.95×10 ⁻¹⁰	5.61×10 ⁻¹¹	1.61×10 ⁻¹¹	4.61×10 ⁻¹²
Galaxolide	1.20×10 ⁻⁰⁹	5.83×10 ⁻¹⁰	6.28×10 ⁻⁰⁶	6.13×10 ⁻⁰⁷	1.23×10 ⁻⁰⁶	1.20×10 ⁻⁰⁷	7.04×10 ⁻⁰⁹	2.02×10 ⁻⁰⁹	1.38×10 ⁻⁰⁹	3.96×10 ⁻¹⁰
Tonalide	4.55×10 ⁻¹¹	2.22×10 ⁻¹¹	1.64×10 ⁻⁰⁷	1.60×10 ⁻⁰⁸	8.51×10 ⁻⁰⁸	8.31×10 ⁻⁰⁹	1.84×10 ⁻¹⁰	5.29×10 ⁻¹¹	9.53×10 ⁻¹¹	2.74×10 ⁻¹¹

95 Organophosphate esters include ^a.Tri(2-chloroethyl)phosphate, ^bTris(2-chloroisopropyl)phosphate, ^c.Tris(2-chloro-1-(chloromethyl)ethyl)
 96 phosphate, ^dTriphenyl phosphate.

97 ^e.ND: Not detected.

98

99 Table S18. Hazard quotients (HQ) of individual antibiotics and current-use pesticides (CUPs) assessed by indoor air inhalation and
100 ingestion and dermal exposure of dust and pet hair-bound contaminants.

Compound	air: inhale		dust: ingest		hair: ingest		dust: dermal		hair: dermal	
	Child	Aldult	Child	Aldult	Child	Aldult	Child	Aldult	Child	Aldult
Sulfadiazine	2.29×10^{-13}	1.12×10^{-13}	1.81×10^{-09}	1.76×10^{-10}	5.80×10^{-10}	5.66×10^{-11}	2.02×10^{-12}	5.82×10^{-13}	6.50×10^{-13}	1.87×10^{-13}
Sulfamethoxazole	4.01×10^{-15}	1.95×10^{-15}	2.47×10^{-10}	2.41×10^{-11}	2.31×10^{-11}	2.25×10^{-12}	2.77×10^{-13}	7.96×10^{-14}	2.59×10^{-14}	7.44×10^{-15}
Sulfapyridine	7.80×10^{-11}	3.80×10^{-11}	5.02×10^{-07}	4.89×10^{-08}	3.09×10^{-07}	3.02×10^{-08}	5.62×10^{-10}	1.61×10^{-10}	3.46×10^{-10}	9.95×10^{-11}
Acetochlor	4.24×10^{-16}	2.07×10^{-16}	8.93×10^{-11}	8.72×10^{-12}	1.64×10^{-11}	1.60×10^{-12}	1.00×10^{-13}	2.88×10^{-14}	1.84×10^{-14}	1.84×10^{-14}
Bensulfuron methyl	7.23×10^{-16}	3.53×10^{-16}	2.88×10^{-12}	2.81×10^{-13}	1.82×10^{-13}	1.77×10^{-14}	3.22×10^{-15}	9.27×10^{-16}	2.04×10^{-16}	2.04×10^{-16}
Bispyribac-sodium	5.26×10^{-13}	2.56×10^{-13}	2.36×10^{-09}	2.30×10^{-10}	2.23×10^{-09}	2.17×10^{-10}	2.64×10^{-12}	7.58×10^{-13}	2.50×10^{-12}	2.50×10^{-12}
Carbofuran	2.45×10^{-15}	1.20×10^{-15}	2.06×10^{-11}	2.01×10^{-12}	1.10×10^{-11}	1.07×10^{-12}	2.31×10^{-14}	6.64×10^{-15}	1.23×10^{-14}	1.23×10^{-14}
Carbofuranphenol	8.67×10^{-14}	4.23×10^{-14}	6.77×10^{-10}	6.60×10^{-11}	1.50×10^{-09}	1.46×10^{-10}	7.58×10^{-13}	2.18×10^{-13}	1.68×10^{-12}	1.68×10^{-12}
Metolachlor	5.63×10^{-16}	2.75×10^{-16}	7.31×10^{-12}	7.13×10^{-13}	3.77×10^{-12}	3.68×10^{-13}	8.19×10^{-15}	2.35×10^{-15}	4.23×10^{-15}	4.23×10^{-15}
2-Aminobenzimidazole	5.82×10^{-15}	2.84×10^{-15}	4.15×10^{-11}	4.05×10^{-12}	ND	ND	4.65×10^{-14}	1.34×10^{-14}	ND	ND
Azoxystrobin	ND ^a	ND	1.02×10^{-11}	9.94×10^{-13}	2.25×10^{-12}	2.20×10^{-13}	1.14×10^{-14}	3.28×10^{-15}	2.52×10^{-15}	7.25×10^{-16}
Carbendazim	4.05×10^{-15}	1.98×10^{-15}	8.77×10^{-10}	8.56×10^{-11}	2.47×10^{-11}	2.41×10^{-12}	9.83×10^{-13}	2.82×10^{-13}	2.77×10^{-14}	7.95×10^{-15}
Prochloraz	ND	ND	3.54×10^{-11}	3.46×10^{-12}	6.02×10^{-12}	5.88×10^{-13}	3.97×10^{-14}	1.14×10^{-14}	6.75×10^{-15}	1.94×10^{-15}
Acetamiprid	ND	ND	2.22×10^{-11}	2.17×10^{-12}	2.86×10^{-12}	2.79×10^{-13}	2.49×10^{-14}	7.15×10^{-15}	3.20×10^{-15}	9.20×10^{-16}
Clothianidin	4.90×10^{-15}	2.39×10^{-15}	2.41×10^{-10}	2.36×10^{-11}	5.19×10^{-11}	5.07×10^{-12}	2.70×10^{-13}	7.77×10^{-14}	5.82×10^{-14}	1.67×10^{-14}
Dinotefuran	2.15×10^{-14}	1.05×10^{-14}	7.62×10^{-10}	7.44×10^{-11}	4.28×10^{-10}	4.18×10^{-11}	8.54×10^{-13}	2.45×10^{-13}	4.80×10^{-13}	1.38×10^{-13}
Thiacloprid	ND	ND	9.21×10^{-13}	8.99×10^{-14}	ND	ND	1.03×10^{-15}	2.97×10^{-16}	ND	ND
Thiamethoxam	5.79×10^{-16}	2.82×10^{-16}	6.76×10^{-11}	6.60×10^{-12}	8.72×10^{-12}	8.51×10^{-13}	7.57×10^{-14}	2.18×10^{-14}	9.77×10^{-15}	2.81×10^{-15}
Diazinon	5.86×10^{-16}	2.86×10^{-16}	9.20×10^{-12}	8.98×10^{-13}	4.81×10^{-12}	8.98×10^{-13}	1.03×10^{-14}	2.96×10^{-15}	5.38×10^{-15}	1.55×10^{-15}
Profenofos	2.59×10^{-14}	1.26×10^{-14}	9.15×10^{-10}	8.92×10^{-11}	2.14×10^{-10}	8.92×10^{-11}	1.02×10^{-12}	2.94×10^{-13}	2.40×10^{-13}	6.90×10^{-14}

101 ^aND:

Not

detected.

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