

## Transport stability of pesticides and PAHs sequestered in polyethylene passive sampling devices

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### Supplementary Information

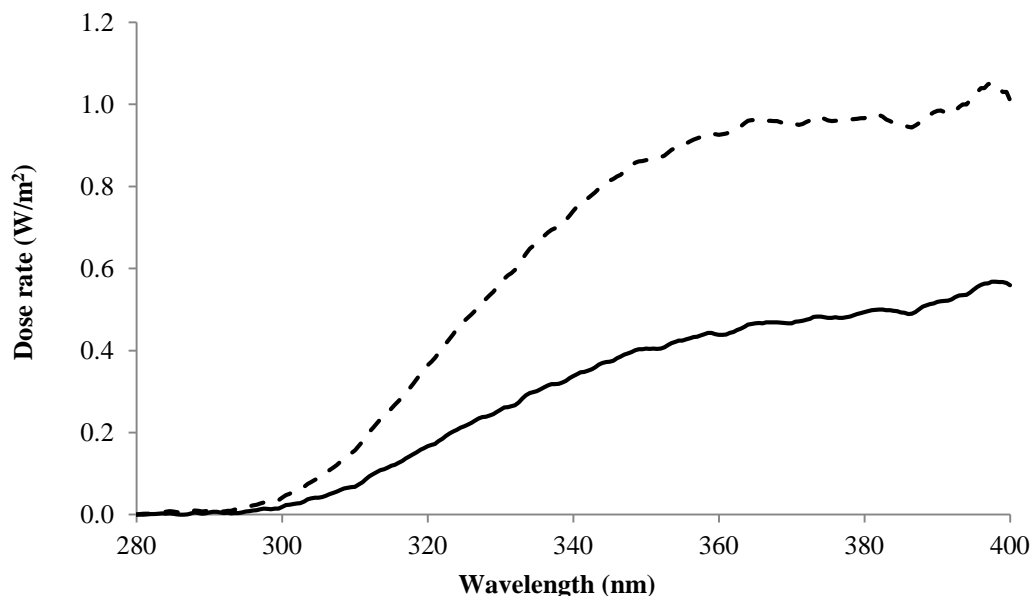
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**Table S1** Transport stability mean recovery ( $\mu\text{g/L}$ ), standard deviation, and sample size. No values were significantly less than control (one-sided Dunnett's test)

	control, t = 0			t = 10 hours			t = 1.5 days			t = 3 days			t = 7 days			t = 14 days		
<b>-20° C</b>		<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>					
alachlor		467	35	4	466	49	4	463	18	4	431	10	4					
$\alpha$ -bhc		256	23	4	250	30	4	254	17	4	243	5	4					
chlorpyrifos		412	31	4	382	48	4	408	13	4	383	11	4					
endrin ketone		350	33	4	324	54	4	343	8	4	311	2	4					
anthracene		550	24	4	577	19	4	615	10	4	592	18	4					
fluoranthene		498	20	4	521	21	4	551	9	4	541	22	4					
chrysene		524	22	4	548	19	4	579	12	4	570	22	4					
benzo[ghi]-perylene		506	22	4	532	20	4	565	11	4	557	21	4					
<b>4° C</b>		<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>					
alachlor		442	33	4	469	37	4	465	28	4	415	20	4					
$\alpha$ -bhc		247	21	4	260	25	4	254	17	4	233	15	4					
chlorpyrifos		391	31	4	406	33	4	417	29	4	367	23	4					
endrin ketone		323	26	4	328	22	4	339	19	4	297	22	4					
anthracene		546	18	4	603	10	4	601	32	4	581	38	4					
fluoranthene		489	14	4	535	9	4	533	28	4	524	35	4					
chrysene		512	16	4	562	9	4	561	29	4	553	36	4					
benzo[ghi]-perylene		495	14	4	548	9	4	547	27	4	538	36	4					
<b>20° C</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>			
alachlor	452	46	8	461	29	4	469	33	4	456	5	4	432	10	4			
$\alpha$ -bhc	246	27	8	244	14	4	250	6	4	247	4	4	245	11	4			
chlorpyrifos	392	35	8	396	22	4	405	22	4	409	9	4	385	11	4			
endrin ketone	339	31	8	321	19	4	330	17	4	338	10	4	310	15	4			
anthracene	572	17	8	571	19	4	606	25	4	609	27	4	592	25	4			
fluoranthene	519	20	8	507	17	4	539	23	4	540	23	4	533	23	4			
chrysene	541	20	8	531	18	4	565	22	4	569	25	4	563	24	4			
benzo[ghi]-perylene	521	18	8	516	15	4	550	22	4	553	22	4	547	18	4			
<b>35° C</b>		<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>	<b>Mean</b>	<b>Std Dev</b>	<b>n</b>		
alachlor		446	21	4	492	8	4	438	22	4	433	34	4	440	25	4		
$\alpha$ -bhc		253	6	4	278	10	4	248	12	4	243	17	4	251	16	4		
chlorpyrifos		401	16	4	436	10	4	394	19	4	390	25	4	402	23	4		
endrin ketone		325	15	4	352	20	4	320	12	4	310	20	4	329	14	4		
anthracene		577	7	4	620	19	4	605	24	4	616	10	4	553	24	4		
fluoranthene		510	6	4	548	7	4	537	21	4	548	11	4	491	22	4		
chrysene		534	5	4	574	2	4	567	22	4	576	15	4	520	23	4		
benzo[ghi]-perylene		519	6	4	557	2	4	551	23	4	558	14	4	503	24	4		



**Fig S1** UV transmittance through PTFE bags. Presented data represent a reference spectrum with the sensor uncovered (dashed line) and the test spectrum collected through one-layer of PTFE bag material (solid line). PTFE bag attenuates UVA and UVB transmittance by 49%.

#### UV Transmittance Test

The irradiation system consisted of a 1000 W xenon arc lamp housed in an Oriel model 6140 lamp housing, driven by an Oriel model 8540 arc lamp power supply. The quasi-collimated UV beam passes through a water-cooled 10 cm aqueous filter to remove infrared radiation and two layers of 4 mm Solarphire PV annealed glass (Pittsburg Paint and Glass, Pittsburg PA) to remove UVC and modulate UVB and UVA wavelengths. Intensity of the UV region of the resultant spectrum (290 – 400 nm) is tuned to 68 W/m<sup>2</sup>, equivalent to the OECD standard dose rate, and has a UVA:UVB ratio of approximately 20. The spectrum closely resembles the solar spectrum for mid-July at Corvallis OR, 44.5667°N latitude, 123.2833°W longitude. Spectral output was measured with a Black-Comet C-50 UV-Vis spectrometer (StellarNet Inc, Tampa FL, USA) running SpectraWiz™ software.