

Supplementary Material

Appendix 1: Filter and DNPH sample collection and storage

In preparation for each smoking session, the glass fibre filter was pre-weighed in a sealed plastic container prior to installation in the REALTIME device filter holder. After the session, the filter was returned to the same container, weighed again, and the container covered with aluminium foil to avoid photo degradation of the sample. The filter and container were stored at -20°C until analysis. Immediately prior to the start of each session, the DNPH cartridge was uncapped, installed in the REALTIME device, and covered with aluminium foil for the duration of the session to avoid photo degradation. After the session, the cartridge was re-capped and placed in its original opaque container. The aldehyde tubes were stored at 4°C at all times before and after the session. During transport to and from the field to the lab, the DNPH cartridges and filters were placed in an ice-cooled insulated container.

Appendix 2: Mean values per session of other species of polycyclic aromatic hydrocarbons and volatile aldehydes

	Mean (SD)
Polycyclic aromatic hydrocarbons*	
- Acenaphthene, ng	2.9 (18.8)
- Acenaphthylene, ng	72.9 (85.0)
- Anthracene, ng	154 (140)
- Benzo[a]anthracene, ng	75.7 (71.7)
- Benzo[g,h,i]perylene, ng	11.7 (37.9)
- Benzo[k]fluoranthene + Benzo[b]fluoranthene, ng	8.2 (34.5)
- Chrysene, ng	105 (67.3)
- Dibenzo[a,h]anthracene, ng	4.6 (21.9)
- Fluorene, ng	124 (58.8)
- Fluoranthene, ng	613 (456)
- Indeno[1,2,3-c,d]pyrene, ng	46.0 (65.9)
- Naphtalene, ng	1690 (1780)
- Phenanthrene, ng	881 (80)
- Pyrene, ng	401 (269)
- TOTAL, ng	4310 (2320)
Aldehydes^	
- Acetaldehyde, ng	767 (438)
- Acetone, ng	233 (143)
- Acrolein, ng	131 (94.7)
- Benzaldehyde, ng	5.7 (24.6)
- Butyraldehyde, ng	97.8 (47.5)
- Crotonalide, ng	0.8 (4.0)
- Hexaldehyde, ng	2.2 (7.9)
- Methacrolein, ng	36.6 (17.7)
- Propionaldehyde, ng	84.5 (66.9)
- p-Tolualdehyde, ng	1.6 (7.1)
- Valeraldehyde, ng	72.7 (43.6)
- TOTAL, ng	1630 (825)

*Number of sessions analysed: 41; ^Number of sessions analysed: 77