



CO-ORDINATION ACTION on Indoor Air Quality and health effects

EnVIE

Building Research Establishment

BRE

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BRE

BRE

- Independent research and consultancy organisation
- Owned by the Foundation for the Built Environment since 1997(charitable body)
- Approximately 600 staff, specialists covering all aspects of the built environment.
- Main site at Watford, near London. Also Scottish laboratory
- Divisional structure; Environment (includes energy), Construction, Fire, Certification.
- Centres of expertise e.g. Environmental Consultancy





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BRE Envie Team



- Derrick Crump, Leader of Air Quality Team, BRE Environmental Consultancy. Environmental scientist at BRE for 21 years undertaking research and consultancy primarily on indoor air quality issues. Particular research interest in VOCs but studied wide range of pollutants, emission from materials, ventilation, air quality in transport, personal exposure and contaminated land. Also central government experience on development of policy. Served on various CEN and ISO committees and EU expert groups.
- John Seller, Head of BRE Environmental Consultancy, responsible for contractual matters and quality issues.
- Colleagues, input can be drawn from broad range of experts including Housing Group concerned with characteristics of building stock, Sustainable Construction, (environmental profiles of products) and Environmental Engineering (building services performance)



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Main recent activities in the field of indoor air quality



- National Survey of IAQ in England during 1999/2000 involving approximately 850 homes.
- Personal exposure to pollutants (1998)
- VOC emission in a new office building (1999)
- Formaldehyde in new homes (1999)
- Impact of pollutants in integral garages on IAQ and personal exposure (2001)
- Development of protocol for assessment of IAQ (2002)
- Application of IAQ assessment protocol in 10 homes and 10 offices (2003)
- IAQ in homes of asthmatic and non-asthmatic children involving 450 homes (2000)



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Main current activities in the field of indoor air quality



- IAQ and ventilation in homes built since 1995
- Technical support for revision of Building Regulations concerned with ventilation provision
- Air quality in aircraft including the EU programmes HEACE, FACE and Cabinair
- Risks of exposure to contaminants due to ingress into buildings on/near contaminated land
- Characterising VOC emissions from construction and consumer products
- Investigations of complaints about IAQ
- Participant of EU HOPE project; IAQ and energy use in homes and offices
- Personal exposure to pollutants, including modelling
- Impact of wood preservatives on the indoor environment



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Proposed BRE contribution to EnVIE



- Participant in Work Package 3; Spaces, characterisation and sources
- Potential contribution by;
 - Provision of building data for the UK building stock
 - Knowledge of emissions from building materials, including test methods and results of product testing.
 - Data on concentrations of a range of pollutants in UK buildings, particularly homes
 - Knowledge of air sampling methods and strategies to inform comparison of data across Europe
 - Experience of study of both ventilation and IAQ
 - BRE widely acknowledged source of technical advice on building related issues and can disseminate knowledge to a wide audience via its publications facility and through seminars.