

Business Council On Indoor Air
Seminar on
Indoor Air Quality and the Workplace

October 8th 1992
Report by Simon Turner

Introduction

This seminar was a general legislative and regulatory overview of the indoor air issue, at least as those inside Washington DC see it. It was hosted by BCIA, and about 35 people attended. BCIA were able to have a good sampling of indoor air "movers and shakers" on the panel and in the audience, which speaks well for their growing influence around town. The audience were attentive but not very responsive at question time.

Opening Remarks - Neil Hawkins, Dow Chemical Company

Hawkins provided a general review of the issue, broadening it as much as he could. He felt the seminar had a number of questions before it, as follows:

- How large are the risks?
- Who has the legal authority to regulate?
- Should we regulate IAQ in some form of cluster approach, or one pollutant at a time?
- What can be considered a good ventilation system design?
- Do we need an IAQ standard?

There followed remarks by each of the invited panel members, as follows.

Paul Cammer - BCIA

Cammer provided an overview of BCIA and its membership. After asking (rhetorically) if regulations can be followed on a voluntary basis, he presented a synopsis of the approach taken by BCIA. He described the Building Systems Approach to consist of:

- a) Ventilation, in compliance with ASHRAE 62-89. This is not regarded by BCIA as a panacea, however.
- b) Filtration, again in compliance with ASHRAE standards.
- c) Regular inspections of the building.
- d) Some kind of certification program for building engineers to ensure proper standards of maintenance.
- e) Establishment of performance criteria for HVAC system performance.
- f) Proper building commissioning, using ASHRAE commissioning guidelines. (These are being updated to include substantially more language on IAQ - I sit on the committee that is working on this).

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John Martonik - OSHA

Mr Martonik is one of the small OSHA team who have been wading through the 1214 sets of comments they received after they issued their Request for Information on IAQ late last year. He said that 17% of the comments they had received were of a technical nature, and the remainder were 'soft' comments or opinions on various IAQ issues. 70% of the respondents felt that they should promulgate an IAQ standard. He was careful not to reveal their decision on the RFI at this stage. However, he did provide some very interesting information on the experience OSHA have had with indoor air. He said that OSHA field offices occasionally see fit to investigate IAQ complaints when they receive them. In 1991, they made 102 such investigations. Of these, 56 were found to have problems with ventilation, 36 were caused by 'other' factors (including hygiene), and 5 were caused by smoking. This is fascinating; their experience matches original data by NIOSH (48.3% caused by ventilation problems, and 2% by smoking) It also matches HBI's current experience (44.3% caused by ventilation, and 3% by smoking). Martonik did not explain what caused the problems in the remaining 15% of their study buildings.

He sees the issues of concern that need addressing are the lack of government ventilation standards, building operator training, source control techniques and technical guidance on IAQ issues. Later he said that formal risk assessments are required to regulate specific indoor air constituents. These do not exist, with the exception of ETS. As a result, they have to decide whether to produce solely an ETS standard, or a broader standard which includes smoking. He was particularly coy about revealing their thinking on using CO₂ as a surrogate standard for IAQ.

Bob Axelrad - EPA

Axelrad gave the latest, condensed version of his standard presentation on the activities of the Indoor Air office. The Indoor Air division has now become part of the Office of Radiation and Indoor Air. This brings radon and other indoor air issues under the same umbrella. He showed how the funding and staff for the office have increased considerably over the past few years.

He too stressed the building systems approach and described source control as not terribly effective. He used the term 'source management' to encompass such efforts as development of low VOC emitting materials. He echoed Martonik in that he sees it as impossible to regulate individual building materials or chemicals, but recognized biocontaminants as an even bigger and more complex issue to tackle via regulation.

Overall, his presentation did not sound so far removed from the position BCIA takes at present.

John Millhone - Department of Energy

Millhone gave a woolly, somewhat naive address on IAQ, revealing that this issue is not exactly an all consuming one for their department. He said that we can expect to see DOE take a more active role in coupling energy requirements to IAQ in the future. He described some of their research efforts on ventilation efficiency.

Lynn Rhinehart - AFL-CIO

Her comments were broadly in line with the approach BCIA takes, in that she would like to see a buildings system approach in place now, rather than waiting for regulation of individual contaminants via PELs or other mechanisms. She feels OSHA are the appropriate agency to regulate

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IAQ, and AFL-CIO are seeking a performance oriented standard from the agency. She stated that smoking should be one of the issues which OSHA should address inasmuch as it is a problem. In general, she recommended more worker education and training, inspection programs and adoption of aspects of ASHRAE 62-89 (But not wholesale adoption, for some reason).

Micheal Jawer - BOMA

The position Jawer took jarred conspicuously with the relatively harmonious message which flowed from the rest of the speakers. He was acutely aware of this and his opening remark gave this away; "I guess we are the folks on the firing line". His main line of defence was the seminars being run by BOMA in conjunction with EPA. HBI staff have attended a couple of these seminars and we have been struck by the low turn-out by property managers. It would be interesting to know just how many property managers are attending these seminars, and what percentage of buildings in the cities they actually represent.

Jawer recognized that IAQ is a market place demand, with vacancy rates even in Washington DC at around 20%. His presentation was a fairly predictable mix of their usual position on the IAQ issue, blaming the tenants for many of the problems found in buildings. He said that most of the complaints are about temperature or smoking; the latter half of this statement is at odds with all our Harris poll data which shows complaints about smoking well behind other issues including noise, lighting, stale air and of course temperature. (see attached).

He criticized ventilation as the answer, justifying this with the technically indefensible statement that the air indoors is often cleaner than outdoors. Not at the outdoor air intakes, it isn't. He claimed that the energy impact from increased ventilation is unacceptable, and that most IAQ complaints come from government and school buildings. I find the position BOMA takes on this issue increasingly untenable and at odds with mainstream thinking on IAQ. If Jawer is perceptive this seminar will have brought this home to him.

The seminar was concluded by a useful review of legislative and legal issues by Steve Rissotto (BCIA) and Bruce Dickson Esq, counsel to BCIA. Rissotto's slides which summarize the IAQ regulations in the States of New Jersey and Washington are helpful and I requested a copy of them from him.

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