THIRD ANNUAL PREMIER IAQ SYMPOSIUM, 1996

A Total Environment... Health, Energy, and Comfort

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SPEAKER'S DINNER

The following people attended the North American Indoor Environmental Professionals (NAIEP) Symposium speaker's dinner on Wednesday night, April 10:

1. Dr. Robert Scarry	Pure Air Control Services, NAIEP President
2. Cathy Cuthbertson	Pure Air Control Services, NAIEP Executive Director
3. Helene Lynn	Florida Education Association (United Fed. Of Teachers affiliate)
4. Robert Axelrad	US EPA, Indoor Air Program
5. Dilip Vyavaharjar	Carrier, IAQ Business Development Manager
6. Kenneth Wallingford	NIOSH, IEQ Research Coordinator
7. Donald Gagnon	Pure Air Controls, Senior Environmental Engineer
8. Skip Camp	Collier County Facilities Manager
9. David Krause	Florida HRS, Toxicology & Hazard Assessment
10. Migs Damiani	Complete Building Services, Washington DC

Dr. Scarry had seen one of Chelsea Group's submittals to OSHA (it is not clear which), and was highly impressed with it. Ms. Lynn views IAQ regulation for schools as an urgent priority. Mr. Vyavaharjar discussed Carrier's new unit geared towards applications in hot and humid climates with high ventilation rates, his own simulation work results, and the Carrier IEQ publication.

Chelsea Group's DOE2 sensible heat ratio results were discussed as well. Mr. Wallingford said that he has not yet reviewed the TB Respirator piece just published, and that Web access may soon include NIOSH Health Hazard Evaluation reports. David Krause described his work with 44 county health officials to deliver IAQ assessments to the residential sector in Florida.

Mr. Axelrad was surprised that his trip to attend was approved. He said that his trips have been scaled back, and must be approved one by one. A recent request for travel to an IAQ conference in Prague was denied "for appearances' sake," despite the offer of the conference to pay all expenses. Radon has been merged with IAQ, meaning that there are now 55 people in this area instead of 20, but there is "no money to spend". After the seventh continuing budget resolution, EPA has finally requested a large chunk of money to spend, but for now continues to operate on an ad hoc basis. The Tools for Schools printing fiasco was reviewed, the new date for re-release of the corrected version is unknown. Jim Dinegar's new career choice was discussed. Mr. Axelrad described it as humorous content public speaking. Mr. Axelrad said, without further explanation, that he has been focused on substantive issues and enjoys being less involved with management, which was something he claims never to have sought.

At Ms. Lynn's urging, he discussed the OSHA regulatory effort, saying that the science to support IAQ regulation is weak, that the EPA carcinogenicity designation should have been adequate to implement ETS controls, and that he doesn't see any regulation emerging while Kassebaum presides over the Labor Committee in the Senate. He specifically stated that the ASH suit would not propel OSHA passed resistance to IAQ regulations, and that OSHA could stall indefinitely. On the points of OSHA's difficulty adapting investigative protocols to blanket regulation, and the failure to grant exemptions to written requirements, Mr. Axelrad agreed that the OSHA proposed IAQ regulation was extremely expensive.

SYMPOSIUM GENERAL SESSIONS

Welcome and introductions were given by the Executive Director of NAIEP, Cathy Cuthbertson of Pure Air Control Services. The President of NAIEP Dr. Robert Scarry, Vice President for Diagnostics with Pure Air Control Services, gave a keynote address, which was a discussion of indoor air quality problems from Dr. Scarry' perspective.

Robert Axelrad gave a presentation entitled "Federal IAQ Update." Mr. Axelrad reported the following:

The EPA's current challenges are:

1. Address dozens of issues simultaneously with limited science, authority, and resources
2. Educate/motivate building owners, managers, tenants, and occupants
3. Develop capabilities of other organizations to address indoor air problems
4. Develop information necessary for informed policy development
5. Survive the 104th Congress

The EPA has no budget this year. There is no set funding for EPA. Every piece of funding must be begged for individually. As an example, the Indoor Air Program has requested a budget amount for April. It will probably be approved and released on or about April 25th, and will have to be spent by April 30th. Last year's expenditures on IAQ research were about $8 million; this year's will probably be $1.5 to 2 million. The EPA is authorized to do research and disseminate information under the Radon and IAQ Research Act of 1986, Title IV of Superfund. EPA has no regulatory authority. The OSHA IAQ rule will not be seen for several years. There is no schedule for the final year. A record 110,000 public comments were received. The EPA's Indoor Air Program strategy is to "Minimize exposure to all indoor contaminants to the extent that it is reasonable to do," by taking action to address pollutants and source-specific issues (e.g. radon, ETS, CO, lead), and improving building design, operation, and maintenance. The latter approach is favored as more effective than the specific approach.

Regarding the EPA's 1993 risk assessment of ETS as a class one carcinogen, there is no new information or action, but EPA continues to do outreach on this issue.

The EPA attempts to "educate/motivate" by providing the public with information, training, and guidance. An example of working with respect to specific sources is the EPA's work with the carpet and adhesives industries. Tools for Schools is available with errors for $22 through the GPO, which has set aside a stock for current demand while returning the bulk for reprinting. The video is available. BAQA is being revived in the private sector. This initiative had been an EPA sponsored program of national organizations committed to promoting good IAQ. Individual building partners that commit to implementing an eight step action plan would receive recognition for good IAQ

management practices. A private sector relaunch is scheduled to take place in Baltimore the week after the NAIEP Symposium.

The BASE Program is a very large study on public and commercial buildings to get good baseline information to fill the gaps in much IAQ research work. The original goal was a multi-year study in about 100 randomly selected buildings, to get comparable baseline data using standardized methods, since "We don't really know how big an IAQ problem we have in this country." Among other purposes, the information is to aid in hypothesis development with respect to indoor air. The study is nowhere near its goal. Twenty-nine buildings have been studied to date. Twelve are scheduled for 1996. Program description and data are to be available on the World Wide Web, with raw data possibly available already on the first thirteen buildings.

Mr. Axelrad further stated in summary that the EPA's Indoor Air Program is busy with reorganization implementation, schools programs, BASE study, information programs, and proficiency privatization.

Kenneth Wallingford, NIOSH's IEQ Research Coordinator who has been with NIOSH since 1971, spoke next. He reported the following:

NIOSH's mission includes information, consultation, lab research, and field research. There is a lot that is not known about IAQ – NIOSH research is intended to plug the gaps. Current projects include

- a study of laser printer emissions, including the development of a chamber and a method for evaluating emissions, and the evaluation of four different printers. Results will be given at the AIHA meetings in Washington DC in May
- longitudinal study of a new public office building, assessing health and environmental relationships. Selected environmental parameters will be surveyed in the middle of each season, along with self-administered health questionnaires.
- aircraft IEQ characterization and IEQ impacts on female reproductive health. Studies on 24 flight segments will include CO, CO_2, NO_2, O_3, VOCs, particulates, cosmic radiation, temperature and pressure. Performed in collaboration with the FAA, it will not be complete for two to three more years.
- a double blind study of "articulate removal intervention" to assess reduction in symptoms with good filtration and cleaning, in conjunction with Lawrence Berkeley Laboratories and the EPA. This study is not off the ground–NIOSH can't find a building willing to participate
- the Health Hazard Evaluation program has performed over 1100 IEQ site evaluations. Reports from 1993 work implicate air distribution, insufficient outdoor air, filtration, pan drainage and pressure relationships. Outdoor pollutant lists now include ETS, due to changes in smoking patterns. A manuscript of findings will be presented at the AIHA meeting and will be published in July's AIHA journal.. The number one culprit in poor IEQ is HVAC maintenance.

- the California healthy buildings study manuscript will be published later this year
- development of standardized sampling and analysis methods for VOCs
- development of standardized sampling and analysis methods for microbiologicals

During questioning, Mr. Axelrad and Mr. Wallingford were asked what research priorities existed for the study of response to low levels or for the study responses to low level mixtures. Mr. Axelrad responded that the EPA is trying to identify the health effect of low levels, particularly non-traditional health endpoints such as near-term irritation and headaches. He stated that the EPA is trying to find predictors to aid in identification and mitigation for contaminants at low levels. He stated that the EPA views the study of mixtures as non-productive, since the combinations are infinite. Mr. Wallingford stated that NIOSH is working with health questionnaires, and is trying to identify meaningful environmental parameters through intervention methods testing and analytical methods development.